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ABSTRACT

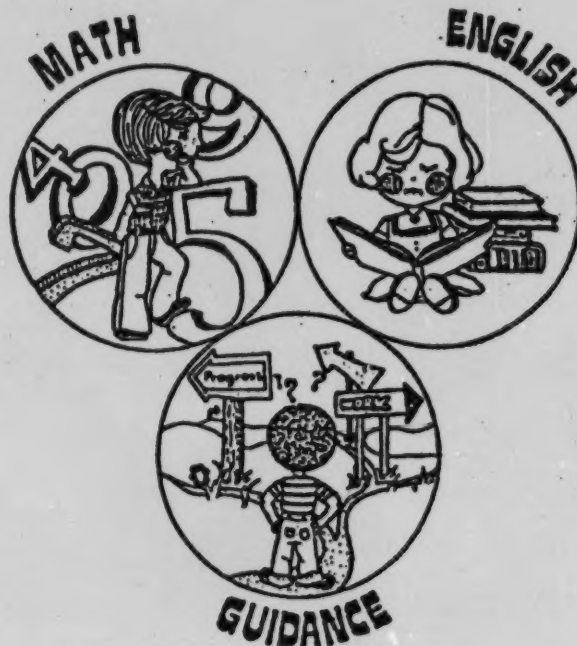
The first of three project goals formulated for the Cleveland Public Schools was to improve the level of mastery of specified language and mathematics skills. The second, but primary, goal of this three-year endeavor was to develop, implement, and refine a replicable mastery-learning instructional model involving a staff team (English teacher/ mathematics teacher/counselor) with "average" grade 7 students. Project implementation provided an opportunity to formulate, test, and refine a workable model based upon the research of Bloom and Carroll. In the cognitive domain, supplementary Mastery Learning: Team Approach (MLTA), instruction focused upon selected verbal/numerical skills. In the affective component, attitudinal aspects of academic achievement were emphasized in supplementary group-guidance sessions provided by counselor-members of project teams. The third project goal, to prepare a procedural manual, was effected on the basis of first-year MLTA operations and was used as a guide for project implementation and revisions during the summers of 1979 and 1980. Despite quite adverse conditions during these years, which prevented project implementation at the intended level, evidence indicated that all three project goals were reached. (Author/RL)

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MASTERY LEARNING: TEAM APPROACH PROJECT

TERMINATION REPORT



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MASTERY LEARNING: TEAM APPROACH

September, 1977 - August, 1980

ESEA TITLE IV-C

PROJECT TERMINATION REPORT

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November, 1980

MASTERY LEARNING: TEAM APPROACH

September, 1977 - August, 1980

PROJECT TERMINATION REPORT

TABLE OF CONTENTS

	<u>Page</u>
SUMMARY.....	v
I. NEEDS ASSESSMENT.....	1
II. PROJECT GOALS.....	2
III. PROGRAM DESCRIPTION.....	3
A. Basic Rationale/Approach.....	3
B. Mastery Learning Team: Theory and Practice.....	3
. Team Composition.....	4
. Pre-/In-Service of Staff.....	5
.. Project-Wide Inservice.....	5
.. School-Level Inservice.....	5
. Level of Implementation.....	6
.. Frequency of Service.....	6
.. Weeks of Service.....	7
.. Total Number Served.....	7
.. Sessions Per Student.....	8
.. Comments on Implementation.....	9
C. Procedural Manual Development.....	9
D. Budget Analysis.....	10

MASTERY LEARNING: TEAM APPROACH
September, 1977 - August, 1980
PROJECT TERMINATION REPORT

TABLE OF CONTENTS
(Continued)

Page

LIST OF TABLES

1. TABLE 1 - AVERAGE TOTAL WEEKS OF MLTA SERVICE PER SEMESTER PER SCHOOL.....	8
2. TABLE 2 - AVERAGE TOTAL NUMBER OF STUDENTS PER SEMESTER PER SCHOOL RECEIVING MLTA INSTRUCTION.....	8
3. TABLE 3 - AVERAGE MLTA INSTRUCTIONAL SESSIONS PER STUDENT.....	9
4. TABLE 4 - ATTENDANCE/RETENTION DATA: 1977-1978.....	18

LIST OF ATTACHMENTS*

A. STATISTICAL TABLES.....	29
B. SAMPLE INSTRUMENTS: TEST/INSTRUCTIONAL CONTENT.....	41
C. CHARTS, FACT SHEETS, ETC.....	49
D. DYNAMICS OF TEAM FUNCTIONING STUDY: 1977-1978.....	67
E. FOLLOW-UP SURVEY: JUNE, 1980.....	72
F. NON-PROJECT INSERVICE WORKSHOP MATERIALS.....	87

(*N.B. A face-page preceding each of these attachments further specifies its contents.)

MASTERY LEARNING: TEAM APPROACH

September, 1977 - August, 1980

SUMMARY

Concern for at least survival-level mastery of basic verbal and numerical skills had been documented at national, state and local levels. Results of a 1975-1976 system-wide needs assessment had confirmed--and citywide testing results had substantiated--the high priority to be placed on language/mathematics instruction in the Cleveland Public Schools. A 1977 guidance needs assessment had corroborated a need for greater emphasis on affective aspects of learning. Thus, improving the level of mastery of specified language and mathematics skills was the first of three project goals.

Project implementation was designed in relation to--but not as a panacea for--this greater need. It provided an opportunity to formulate, test and refine a workable model--based especially upon the research of Bloom and Carroll. In the cognitive domain, supplementary MLTA (Mastery Learning: Team Approach) instruction was focused upon selected verbal/numerical skills and utilized a mastery approach. In the affective component, attitudinal aspects of academic achievement were emphasized in supplementary group-guidance sessions provided by counselor-members of project teams. Developing, implementing and refining a replicable mastery-learning instructional model involving a staff team (English teacher/mathematics teacher/counselor) with "average" seventh-grade students was the second, but primary, goal of this three-year endeavor.

On the basis of first-year MLTA operations, a Procedural Manual was prepared. Team members used the Manual as a guide for project implementation and provided input for its revisions during the summers of 1979 and 1980. This revised Procedural Manual was edited for continuation purposes and dissemination--the third project goal.

Mastery Learning Team: Theory and Practice

The team at each participating junior high school was to include at least one English teacher, one mathematics teacher and one counselor. The principal was to coordinate these staff persons' unassigned periods with "average" seventh-grade classes' study halls, to facilitate scheduling MLTA supplementary instruction during the school day. Each MLTA teacher was to provide MLTA language/mathematics for about thirty students at least two/three periods per week, and the counselor was to schedule (the approximately sixty) participating seventh-graders into supplementary guidance at least weekly. The number of times per week and the total number of weeks a given participating student was to be served were not dictated: the student's needs and the service required for him/her to attain mastery were to be the determining factors, in keeping with the theory underlying the entire undertaking. The total number of

weeks per 18-week semester that MLTA instruction was to be offered was expected to be at least ten-to-twelve (with a few weeks at the beginning of each semester allowed for organization/pre-testing and two-or-three at the end for post-testing).

Direction for MLTA implementation was provided in several ways. Project-wide inservice meetings were scheduled by the project manager, approximately monthly. Subject supervisors and visiting consultants provided theoretical and practical direction for teams, and after the first year each team member had a copy of the Procedural Manual for reference. Specially devised language/mathematics tests were utilized for assessing individual students' needs and, supplementary to tests embedded in the instructional materials, assessing their progress. Teams met before or after school to plan their work with students, and the manager met with each team with some frequency to monitor local activities in relation to project-wide goals.

The Cleveland Public Schools' extraordinary situation during these three project years seemed to have been especially designed for testing the feasibility of implementing MLTA under quite adverse conditions. Frequent reorganizations of schools and their staffs/students because of voluntary and court-ordered desegregation; annual work stoppages (one lasting some eleven weeks in 1979-1980); teacher-shortages (necessitating many mathematics teachers' "covering" an extra class on an ongoing basis); staffing additional activities prior to and during each phase of desegregation implementation (according to the Court's remedial order); etc.--all affected the level at which MLTA could be implemented.

- Thirteen different junior high schools were among the six or seven participating each semester in MLTA. A total of 57 staff--19 each, English/mathematics-teachers and counselors--participated as team members.
- Data for the second and third years of MLTA indicated that, per 18-week semester, project services were offered over a range of from (averages) six weeks (language, 1979-1980) to eleven weeks (mathematics, 1978-1979). Median numbers of weeks when language/mathematics instruction was offered at least two periods per week were approximately six in language and five in mathematics.
- The (average) total number of participating students per school dropped from 24.0 in the first year to 13.2 in 1979-1980 in language and from 29.3 to 24.8 in mathematics. Almost all language and/or mathematics students were served in guidance.
- The per school average total times (periods) the MLTA student received supplementary instruction ranged from 3.3 to 13.1 in language, from 1.8 to 22.3 in mathematics, and from 3.2 to 16.5 in guidance.

Under the aforementioned conditions far beyond the control of the school system or the project manager, the MLTA model was not implemented at the intended level--a fact to be considered in assessing outcomes.

Project Outcomes

Three types of performance objectives guided MLTA operations. In relation to language and to mathematics, one objective pertained to student mastery of at least one skill in which a deficiency had been identified. Another type of language/mathematics objective involved comparison of served and non-served student groups' post-test performance on more global (multiple-skills) measures. The third type of objective dealt with the more affective aspects of the model, primarily student reactions to MLTA service during the second and third years of the project.

Data relevant to the skills-mastery objective in language were maintained at the schools, to be submitted near the end of each semester. For 1977-1978, information from only three schools indicated that 50 (93%) of 54 students had demonstrated the proposed mastery. Data for 1978-1979 were available for 137 students, with 104 (75.9%) attaining the proposed mastery of at least one skill; however, the results were 93.8% and 94.1% at two schools. From five schools, information about 39 students served seven or more times in language during 1979-1980 showed that only 25 (64.1%) overall had "made the objective," but seven of eight at one school (87.5%)--and all three at another--had. Generally, the percentages of students reported to have mastered at least one language skill decreased from the first to the final year.

Another objective in language each year pertained to pre-post comparison. In 1977-1978, project students showed a slightly greater increase than did controls in the percentage scoring "above average" (stanines 7-9) in seventh grade (compared to sixth) on the CTBS Language: Mechanics subtest. During the second year there was no significant difference in CTBS post-test means (with pre-test as covariate) between served and non-served students. Also for 1978-1979, a comparable analysis using scores on the locally developed Mechanics/Usage test yielded no significant differences between MLTA and controls, although F's were larger than with CTBS. In 1979-1980, MLTA (served at least seven times in language) students' (N = 40) gains on Mechanics/Usage were significantly greater ($p < .05$) than the controls' (N = 186), as proposed.

In mathematics, also, one objective each year proposed skills-mastery. Based on 1977-1978 data for 71 MLTA students (from only three schools), the objective was not attained: only 53 (75%) had mastered one or more skills. The following year, 166 (82.2%) of 202 students for whom data were submitted had mastered at least one skill. Reports on 47 1979-1980 students (four schools) showed 40 (85.1%) demonstrating the proposed mastery. Criterion levels varied from year-to-year, but increasingly larger percentages of students showed mastery of at least one deficient mathematics skill through the three years.

Pre-post comparisons in mathematics were completed each year. For 1977-1978, there was no significant difference between MLTA students and controls in the percentages scoring "above average" (stanines 7-9) in seventh vs. sixth grade on the CTBS Mathematics: Computation sub-test. Similarly, during 1978-1979 there was no significant difference between served and non-served students in CTBS post-test means (with pre-test as covariate). There was, however, a significant ($p < .001$) difference in post-test means favoring the MLTA students in a comparable analysis of covariance with scores on the local Survey (of mathematics fundamentals). For 1979-1980, there was no significant difference in gains between the served (at least seven times) and non-served students.

Affective aspects of MLTA were first assessed in relation to two 1977-1978 objectives, one utilizing the pre-post results on the Survey of School Attitudes (on which no significant differences occurred) and another dealing with attendance/retention (on which significant differences favoring MLTA students were evident). During the second and third years, at least 80% of the students served in language and/or mathematics were proposed to express positive attitudes toward (i.e., mark at least one favorable response-choice about) that instruction. Most often marked was the opinion that MLTA instruction "helped me understand the regular classwork better." Both years the percentages of mathematics-served students responding favorably exceeded that proposed (87.0% and 83.6%), while the parallel proportions among language-served were 79.4% and 74.3%. Student reactions toward the guidance component were comparably favorable.

Conclusions

Evidence indicated that all three project goals were reached, despite adverse conditions which prevented project implementation at the intended level. Participating students' demonstrated gains in mastery of specified language and mathematics skills, though not usually to the extent proposed in annual performance objectives. The proposed team model--including cognitive and affective components--was developed, tested and refined. It has been demonstrated that this model for a team approach to providing supplementary instruction on a "pull-out" basis can work. The twice-revised Procedural Manual has been readied for extended continuation/dissemination.

Recommendations

The outcomes pertinent to formally proposed facilitating/performance objectives and less systematically collected observations indicate that anyone considering adopting MLTA realistically assess and plan to deal with commitment--individual and institutional --to mastery-learning "theory" and of the time/effort required. Beyond this, careful selection of students and pre-planning are advised. Furthermore, it is recommended that in the Cleveland Public Schools the Procedural Manual and the informative supportive assistance of the former project manager and MLTA team members be made available on a broad scale. Extended application of mastery learning strategies implemented through the MLTA project should help staff to demonstrate to the larger community that, in a desegregated setting, "most students can learn as well as the most able."

I. NEEDS ASSESSMENT

Concern for mastery of basic skills to at least levels necessary for survival in our society had been clearly expressed at national, state and local levels. Documentation at the national level had been publicized through media coverage of the National Assessment of Educational Progress¹ and efforts to legislate a nationwide requirement of demonstrating via tests minimal competency in "the 3 R's" in order to receive a high-school diploma.² Concurrently, the State of Ohio placed the areas of reading-and-language-arts and mathematics at the head of the list of critical needs.³

Pertinent data from the most recent citywide needs assessment conducted by the Cleveland Public Schools were based on responses from a sample of 3,239 students, 1,099 parents and 1,473 instructional and administrative school staff. Among the nine goals presented, to "acquire the functional use of basic skills--3 R's" received a mean rank in importance of 3.80 (a mere .03 below the goal ranked first). Attainment of this goal, however, was rated less than "adequate" (=2, on a three-point scale) by parents (1.99) and school staff (1.83). This discrepancy between importance and attainment made this goal of developing language and mathematics skills top priority.⁴

Relevant to affective as well as cognitive aspects of education were the results of a Guidance Needs Assessment completed during the Spring of 1977. Secondary-school administrators and counselors (N = 324) rated 13 group-guidance topics (goals) on a five-point scale relevant both to importance (5 = "essential") and to actual attainment (4 = "adequate"). Among the six most important (with mean ratings shown in parentheses) were: "growth in self-understanding, level of aspiration, motivation" (4.39), "increased confidence through development of improved study skills" (4.20), and "information relevant to everyday survival skills..." (4.15). Attainment ratings of these three goals, however, fell short of adequate (with mean ratings of 3.66, 3.51, and 3.63, respectively).⁵ These findings indicated

¹"9-year-olds improve, teens slip in reading," The (Cleveland) Plain Dealer, March 22, 1977.

²"Required testing favored for high school diploma," The (Cleveland) Plain Dealer, April 2, 1977.

³Ohio Guidelines for Innovative and Support Projects (ESEA Title IV, Part C). Columbus, Ohio: Division of Planning and Evaluation, Department of Education, n.d., p. 3.

⁴Cleveland Public Schools Needs Assessment Report: 1975-1976 (funded under Title IV-C). Cleveland (Ohio) Public Schools, Division of Research and Development, 1976.

⁵Guidance Needs Assessment: March, 1977. Cleveland (Ohio) Public Schools, Division of Research and Development, 1977.

awareness of the need for further emphasis (especially through the guidance program) on affective aspects of education as well as on basic skills.

The most recent (eighth-grade) citywide testing in language and mathematics was composited for a group of nine junior high schools where it was anticipated that project teams might be activated during 1977-1978. These schools were distributed throughout the city and known by supervisors to have large proportions of potential student participants (performing in the average range and likely to improve with supplementary instruction based on diagnosed needs plus additional motivational support). The test results (shown in Attachment A-1) confirmed the availability of student populations who could be expected to benefit from project participations.

Mastery Learning: Team Approach (hereafter referred to as MLTA) was designed for helping "average" students improve mastery of selected verbal and numerical skills considered most "basic." MLTA provided an opportunity to develop, test and refine a unique model for providing on a "pull-out" basis supplementary individual and/or small-group instruction for selected seventh graders. Increasing participating students' mastery of designated skills through MLTA represented one innovative approach to meeting the larger educational need indicated above.

II. PROJECT GOALS

The ultimate goal of the project was--and is--optimizing student achievement, in school and later life. Ability effectively to utilize basic verbal and numerical language was recognized as underlying attainment in all fields and, thus, necessary for survival as a citizen. More immediate goals were:

- improving the level of mastery of specified language and mathematics skills among participating seventh-grade students;
- developing, testing and refining a team model for effecting such improvement, incorporating:
 - a cognitive component utilizing a mastery approach (with supplementary instruction based on individual needs identified by classroom teachers), and
 - an affective component dealing with attitudinal aspects of academic achievement (through supplementary group guidance provided by counselors);
- dissemination of information relevant to implementation and effectiveness of this team model.

III. PROGRAM DESCRIPTION

As indicated in the needs assessment section, improvement of basic language and arithmetic skills was (and remains) of high priority for all students. It had been noted by the original planning group that many students performing at an average level were capable of doing much better, but that these young people were infrequently involved in special programs, such as those for remediation of the disadvantaged or extremely low-achieving. Developing, testing and refining a unique and replicable model for raising students' achievement levels in selected basic skills underlay the procedures and strategies built into project design.

A. Basic Rationale/Approach

Although results of many investigations were reviewed, in terms of basic rationale the proposed approach relied most heavily upon the research of Bloom and Carroll.⁶ Five features of their mastery learning strategy were emphasized in project design.

- Most students can learn as well as even the most able, at least in certain subjects.
 - . This may require extra time and assistance.
 - . Such assistance, based on individual diagnoses, is typically carried on outside regular class time.
 - . It is most effective when provided at the beginning of a new phase of schooling, e.g., the first year of secondary school.
- There is an interactive effect between the cognitive and affective aspects of learning.

B. Mastery Learning Team: Theory and Practice

In keeping with the rationale underlying MLTA, service to students at each participating junior high school was to be provided by a mastery learning team. Each team was to include at least three staff members: a counselor and two teachers--one English and one mathematics. Each teacher was to devote two/three unassigned periods per week to utilizing mastery learning strategies with participating students, individually and/or in small groups. The counselor was to schedule special, weekly small-group guidance related to increasing motivation for academic achievement for all participating students. Team members

⁶Benjamin S. Bloom, Human Characteristics and School Learning. New York: McGraw-Hill, 1976. J. B. Carroll, "A Model of School Learning," Teachers College Record, LXIV (May, 1963), pp. 723-733.

were to work with the principal to optimize coordination of team teachers' unassigned periods with participating students' study-hall times, to facilitate scheduling of supplementary instruction within the regular school day and in appropriate locations within the building. Sample schedules for a team and for a student have been included as Attachments C-1 and C-2, respectively.

Team Composition

During each of the six semesters of project operations, teams were functioning in six or seven schools where staff had indicated sufficient interest and scheduling of MLTA seemed feasible. From 1977 (Fall) through 1980 (Spring), 57 staff--19 each, English teachers, mathematics teachers, counselors--were involved at a total of 13 junior high schools with 17 principals participating. A complete roster has been included as Attachment C-3, from which several observations are relevant.

- Only two schools were involved for all six semesters (three years), two for four semesters. Most (seven) participated for one year (two semesters); one school fielded a team for a year and a half, another for one semester.
- Over the three-year period, a prescribed three (or more) person team was in place in from five (of six) to seven (of seven) schools--83.3-100.0%--during the first semesters. During the second semesters, team membership was "complete" in only slightly more than half (55.6%) of the schools.
- Among staff comprising project teams, continuity was greatest among mathematics teachers. Two mathematics teachers were with the same teams for all three years--and another for five consecutive semesters. The typical MLTA mathematics teacher served 2.4 semesters, while the averages for guidance (1.9) and English (1.7) were lower.
- As indicated in the manager's monthly reports, throughout the three years of project operations, unusually high numbers of teacher/counselor resignations and reassignments precluded building continuity in most teams.
- MLTA participation was voluntary. Teams were fully staffed only about 73.7% of the time (by school and semester), and only 19.3% of the participating teachers/counselors were (or could be) involved for more than two semesters--two facts to be considered in reviewing the outcomes relevant to performance objectives (Section IV).

Pre-/In-Service of Staff

The staff development component of the project included, each year, both project-wide workshops and team/school activities. The scheduling of project-wide events, especially, was affected not only by needs of participants but also by unprecedented revisions in the school-year calendar because of work stoppages; unexpected resignations/reassignments of staff; and, other extra-project circumstances.

Project-Wide Inservice.--As proposed, half-day/evening project-wide sessions were scheduled approximately monthly, each year beginning with a pre-service/orientation workshop. Agendas included a balance of mastery-learning theory and project implementation "practice," with provision for whole- and sub-group involvement. Supervisors and other headquarters staff, and building principals, were always invited to participate--and did, as possible. Meetings at the beginning or near the end of a semester were devoted primarily to mechanics of pre-post testing, reporting, etc., while others emphasized applications of mastery-learning theory--especially those on November 21, 1978 and March 3, 1980 when mastery-learning consultants from Lorain, Ohio and Chicago, Illinois, respectively, shared their expertise with the group.

These project-wide meetings--a total of 16--were held approximately monthly during the first five semesters of project implementation (as indicated by the dates listed in Attachment C-4). Those attending each session completed a reaction form which required indicating an overall impression of the meeting in relation to project goals and objectives. (A sample reaction sheet has been included as Attachment B-1.) On a five-point scale with 3 = "average" and 5 = "excellent," mean ratings for the project-wide sessions ranged from 3.9 to 4.3 during 1977-1978, 4.0 through 4.8 the second year and 4.3 through 4.8 for 1979-1980.

School-Level Inservice.--In addition to the project-wide meetings, less formal inservice was available to all team members on an ongoing basis. Further understanding of mastery learning strategies as well as MLTA procedures was promoted during team meetings at project schools (in each of which the project manager participated from time to time) and--during the second and third years--through individual/team study of the procedural manual.

Ongoing "inservice" was always available to second- and third-year team members in a second way--through reference to the Procedural Manual. (The development of this Manual and its utilization for dissemination are discussed later, in sections III-D and V of this report.) On the 1979-1980 monthly reports submitted by team members with student service/attendance records, respondents were to rate the usefulness of the various sections of the Manual to them that month by circling a numeral on a five-point scale (1 = "little," 3 = "some," 5 = "great"). English/mathematics teachers' and counselors' average ratings of the general section of the Manual ranged from 2.7 to 3.8 during 1978-1979 and from 3.4 to 4.0 the following year. English/mathematics teachers' and counselors' ratings of their respective specialized sections of the Manual ranged from 3.5 to 3.9 and from

3.5 to 4.0 during the same two years. (A summary of all ratings has been included as Attachment C-5.)

As proposed, teams met before or after school for about an hour, on dates agreeable to members--generally once or twice a month. During 1977-1978, teams averaged about eight meetings per semester, six-to-seven per semester the following year, and only about three per semester during 1979-1980 (when staff reassignments were especially frequent and faculty time was pre-empted for higher system-wide priorities, notably, class coverage and special desegregation activities). The dynamics of team functioning was monitored throughout the three years (as proposed in the facilitating objectives). During 1977-1978, in addition to the project manager's on-site visits and report forms sent to the manager and evaluator following every meeting, each team member systematically submitted perceptions of team dynamics. (Analysis of these data is presented in Attachment D.) Subsequently, systematic monitoring of team meetings was limited to brief reports (Attachment B-2) submitted to the manager and evaluator after each meeting--to provide essential information without unnecessary "paper work."

Level of Implementation

During 1978-1979 and 1979-1980, team members were to submit to the evaluator monthly reports of dates on which students were served in language, mathematics and guidance. (Such data were not collected during 1977-1978.) Most team members faithfully fulfilled this responsibility. Inspection of these reports and compilation of information thus submitted--along with less-detailed records required during 1977-1978--provided documentation of the extent of student-service in each (subject) area.

Service records submitted from project schools (especially in the detail required during the second and third years of the project) were useful in assessing the extent to which teams were able to "...implement mastery learning strategy at an acceptable level..." (FO-1.5). With the State consultant, the project manager and evaluators --and Cleveland Public Schools supervisors/administrators involved with the project--agreed that the English/mathematics teachers' providing MLTA instruction at least twice a week and the counselors' scheduling special MLTA guidance sessions at least once a week would constitute an "acceptable level" of implementation. Neither the intensity of student-service (number of times per week the participating student should receive special project instruction) nor the minimum number of weeks per 18-week semester an MLTA team should be active, however, was explicated.

Frequency of Service.--The more detailed records submitted throughout the second and third project years indicated that implementation reached the pragmatically defined acceptable level for varying numbers of weeks in the three project areas and the several project schools. Numbers of weeks during which records submitted by team members indicated that project service in each area had been offered were compiled, for 1978-1979 and 1979-1980; a summary has been included as Attachment C-6. Student reactions to MLTA instruction during these same two years and staff responses to a (1978-1979) end-of-semester survey--summarized in Attachments C-7 and C-9, respectively--provided

additional indications of the "acceptability" of the level at which the service had occurred.

- During the second and third years of project operations, MLTA language instruction was provided at least twice a week for from three to eleven weeks per eighteen-week semester. The approximate school median was six weeks.
- In mathematics during the same two years, MLTA instruction reportedly occurred twice a week for from zero to thirteen weeks per semester. The school median (approximate) was five weeks.
- On the average, MLTA guidance was offered weekly during nine weeks (range: 4-12) per semester.
- Respondents to the 1978-1979 staff survey at the end of the year agreed that the MLTA instructional "time spent with students during unassigned periods" was less (in extent/duration) than "just right." (Mean ratings were 2.1, 2.6, and 1.9--respectively--from English teachers, mathematics teachers and counselors; on the five-point scale: 1 = "not enough," 3 = "just right" and 5 = "too much".)
- Each semester the student survey (Attachment B-7) administered by the MLTA counselor included "wasn't available often enough" among the six phrases (any or all of) which could be marked to describe the MLTA language or mathematics instruction. During 1978-1979, this descriptor was chosen by 16.6% of the students for language and 14.8% for mathematics. In 1979-1980, one fifth (20.0%) marked this option for each area. (Response summary is included as Attachment C-7.)

Weeks of Service.--During 1977-1978, the total period of project service was approximately 24 weeks, or 12 weeks per 18-week semester. Records were not required/submitted for separate semesters or for separate areas of project service. More detailed data submitted by teams during 1978-1979 and 1979-1980 yielded the average weeks of MLTA instruction offered (per semester), shown in Table 1. In project schools where teams could be mobilized in spite of difficulties far beyond project control, service was actually offered during approximately half of each eighteen-week semester.

Total Number Served.--The number of students participating provided another indication of implementation level. A first-year facilitating objective called for approximately sixty students to be served at each project school--about half this number, each, in language and mathematics and all in guidance. These same numbers were reiterated in the editions of the procedural manual used in subsequent years. The average number of students served each year--best approximated by the guidance count--almost totaled that proposed during 1977-1978. The numbers decreased in the second and third years, however, as time during the school day when team members and students were both unassigned became less and less available for MLTA activities. (See Table 2.)

TABLE 1
AVERAGE TOTAL WEEKS OF MLTA SERVICE
PER SEMESTER PER SCHOOL

Instructional Area	School Year:		1977-1978		1978-1979		1979-1980	
	Semester:		1	2	1	2	1	2
Language			12*	12*	10.0	9.5	6.0	8.0
Mathematics			12*	12*	9.0	9.0	9.5	11.0
Guidance			12*	12*	8.0	11.0	9.0	9.0

*Data for 1977-1978 are approximate, since detailed reports from schools were not required.

TABLE 2
AVERAGE TOTAL NUMBER OF STUDENTS PER SEMESTER PER
SCHOOL RECEIVING MLTA INSTRUCTION

Instructional Area	School Year:		1977-1978	1978-1979	1979-1980
Language			24.0	27.8	13.2
Mathematics			29.3	29.3	24.8
Guidance			59.8	44.8	36.0

Sessions Per Student.--Relevant to implementation of the project model, the average number of instructional sessions per year--or average times served per student--should have, theoretically, reflected only the seventh-graders' varying needs for assistance in order to attain mastery of specific skills in which deficiencies had been identified. Given the realities of junior high school master schedules along with the widely publicized vicissitudes of the past three years in the Cleveland Public Schools, average-times-served-per-student⁷ became one further indicator of level of implementation. Data relevant to average number of MLTA instructional sessions per student--summarized in Table 3--evidenced wide variations within each instructional area each year.

⁷Student attendance data for each "subject" from each school were averaged, to arrive at a mean-times-served in each project area for each school. The averages referred to here are the approximate project-wide medians of those school means.

TABLE 3
AVERAGE MLTA INSTRUCTIONAL SESSIONS
PER STUDENT

Instructional Area	School Year 1977-1978	School Year 1978-1979	School Year 1979-1980
Language	N* 2 Range** 3.3 - 9.4 Mdn. 6.3	6 3.5 - 13.1 7.6	6 4.2 - 12.8 8.2
Mathematics	N* 6 Range** 6.3 - 15.7 Mdn. 10.9	7 4.5 - 22.3 12.8	6 1.8 - 19.2 5.6
Guidance	N* 2 Range** 6.8 - 12.7 Mdn. 9.8	6 5.6 - 16.5 8.2	7 3.2 - 11.5 4.6

*N = Number of schools reporting

**Range of means by school

Comments on Implementation.--Documentation relevant to level of implementation reflected the upheavals and uncertainties which plagued the Cleveland Public Schools during the project period. The project manager was not empowered to insure the level of implementation even to the extent not-too-clearly specified in facilitating objectives and the procedural manual--a fact to be considered in appraising (reasons for) outcomes pertinent to performance objectives.

C. Procedural Manual Development

On the basis of initial MLTA operations during 1977-1978, the preliminary version of the procedural manual was compiled during the Summer of 1978. Input had been gathered formally and informally from all teams during the first year, and reactions/suggestions from users--for whom the manual provided ongoing inservice, as mentioned earlier--guided writing teams in revisions made during the Summers of 1979 and 1980. The three, summer writing/revision teams included four mathematics teachers, three English teachers (in addition to the project manager) and five counselors--all identified in Attachment C-3.

The original basic outline for the manual proved workable. The first section was devoted to mastery learning strategy based on the Bloom-Carroll Model, the project rationale. The second major section dealt with procedures: selection of students most likely to benefit from MLTA; scheduling staff and students for MLTA instruction; team operations/responsibilities; project-wide inservice; etc. Then followed two specialized sections, one each for mathematics and English, including: resource materials, instructional suggestions, sample reporting/

record-keeping forms, and a bibliography. The third specialized section provided a compilation of "practical" instructional resources/activities for guidance--plus a bibliography. (Copies of the revised Procedural Manual are being submitted as a separate document.)

D. Budget Analysis

Analysis of the budget indicated that all federal support was granted through ESEA Title IV-C, in an amount of approximately \$256,000. Supplementary LEA support throughout the three-year period approximated almost \$13,000--in administrative/supervisory time and housing the project. Details have been listed below.

- Total federal support under ESEA Title IV-C....\$243,392
- Total federal support other..... -0-
- Total non-federal support (LEA - estimate).....\$ 12,750
- Total project cost.....\$256,142

IV. PROJECT OUTCOMES

Throughout the three-year period, the original project goals (listed in Section II) were not changed. However, the specific objectives and some features of the evaluation plan were revised for the second and third years--on the bases of the most current findings as well as recommendations from the (Ohio Department of Education) Division of Planning and Evaluation consultants.

A. Objectives/Instrumentation

Three basic types of performance objectives guided project operations from 1977 to 1980. In relation especially to the cognitive components of the model, two objectives pertinent to each "subject area" (language, mathematics) focused on:

- improvement of students receiving project services, in one or more specific skills in which weakness had been diagnosed, and
- pre-post comparisons of served and control students on multiple-skills measures.

The third type of objective dealt with the more affective aspects of the model--student reactions to project service (and, during the first year, attitudes toward school subjects and attendance).

Revisions in the evaluation plan affected all performance objectives in varying degrees. Percentages of students proposed to attain mastery levels in designated skills were revised as experience with the model was gained. Instrumentation, also, was revised--with the approval

of State consultants. Data relevant to project outcomes have been subsequently organized by type of objective, to reflect modifications during the three years.

B. Skills Mastery: Language (PO-1)

Year 1: Ninety per cent (90%) of students participating in supplementary instruction in language will attain at least 85% mastery in at least one skill in which that level of mastery had not been demonstrated on the pretest. Pre- and post-tests incorporated into the Target Mechanics and Usage Kits will be utilized as students are scheduled into and out of instruction.

As project English teachers worked with students individually and in small groups on skills where weaknesses had been diagnosed, they maintained records of assistance provided. Embedded pre- and post-tests accompanying each of the instructional units (five in Mechanics, five in Usage) were administered and scored. (See Attachment B-4 for list of skills by unit.)

Data on students' progress through mechanics and usage units were submitted by only three of the five schools providing mastery-learning instruction in English--Carl F. Shuler, Joseph M. Gallagher and Robert H. Jamison. From those schools information for only those students who had been served at least five times (thus considered participants) was analyzed. From 80 to 100% at each school had demonstrated the proposed mastery. Of the total 54 participants, 50 (93%) were reported to have mastered at least one unit. Although the data were not complete, it appeared that the objective had been attained.

Year 2: A total of 90% of students participating in supplementary instruction in language (usage and mechanics) will attain at least 80% mastery of at least one skill in which that level of mastery had not been demonstrated on the pretest.

Supplementary language instruction was offered in six project schools during the first semester and five the second. MLTA English teachers utilized the pre- and post-tests incorporated into the Target units, as in the first year.

At these schools, the percentage of language-served students attaining at least 80% mastery in at least one skill in which that level of mastery had not been demonstrated on the pre-test ranged from 23.7% to 94.1%. Of the total of 160 students served in mechanics and/or usage, pre-post scores on specific skills were available on the embedded or diagnostic tests for 137. Of these, 104 (75.9%) did evidence the proposed 80% mastery. Although the objective was not attained project-wide, 93.8% at Alexander Hamilton and 94.1% at Margaret Spellacy demonstrated the proposed level of mastery.

Year 3: At least 80% of students participating in supplementary instruction in language (usage and/or mechanics) at least seven times will attain at least 80% mastery in at least one skill in which a level of mastery had not been demonstrated at higher than the 50% level on the pre-test (the locally developed diagnostic test).

At five project schools, 43 students were served seven or more times in language during 1979-1980. Analysis of pre-post results on the diagnostic tests--available for 39 students--showed that from 37.5% to 100.0% had mastered at least one skill. Project-wide, 25 (64.1%) had demonstrated the proposed improvement in at least one of the ten mechanics/usage skill areas. Although the project objective was not attained, seven (of eight) students (87.5%) at Charles W. Eliot and all three (100.0%) at A. B. Hart did attain the proposed mastery.

C. Pre-Post Comparisons: Language (PO-2)

Year 1: Results of tests in . . . language (mechanics and usage) next administered citywide to seventh-grade classes of 1977-1978 will evidence increasing percentages of students in the above-average "band" (stanines 7-9). Monitoring results of the citywide testing program, although the administration schedule does not coincide with checkpoints for project operations, should reflect potential effects of a small-scale project on the total school.

Some project (N = 129) and control (N = 45) students completed a special administration of CTBS: Language (Mechanics) during May, 1978. (They had taken this test the previous year during the citywide administration.) Percentages of these students scoring in the above-average stanine band in sixth and seventh grades were calculated for MLTA-served (at least five times) and control students, for whom complete data were available. As shown in Attachment A-2, project students served in language showed a slight increase from sixth- to seventh-grade in the per cent scoring "above average," while non-project students in project and control schools evidenced decreases of approximately 11%, suggesting attainment of the objective.

Year 2: Students participating in supplementary instruction in language will attain significantly higher mean post scores ($p < .05$) on the CTBS: Language than will students in the control group.

The CTBS Language, Form Q, Level 3 (Mechanics plus first ten items of Expression) was administered by project English teachers during the weeks of October 30, February 5 and May 21 for purposes of assessing progress. Analysis of covariance, using the pre-scores as covariate, was completed on first semester data. (See Attachment A-3.) Both pre- and post-scores were available for 66 students who received language assistance and for 199 control students (not involved with project language/guidance). The difference between the groups was not significant ($F = .012$); the objective was not attained.

Year 2 (Supplementary⁸): Students participating in supplementary instruction in language will attain significantly higher mean post-test scores ($p < .05$) on the Mechanics/Usage locally developed tests, based directly on the Target materials in these areas.

At the inception of the project, two 40-item tests were developed by the manager (certified/experienced English teacher), the Directing Supervisor of English and Language Arts, and the evaluators. Each test was divided into five sections of eight items each. Each section corresponded directly to the content of one unit of the Target materials in Mechanics or Usage, shown in Attachment B-4. The section scores were initially intended for identification of potential student participants and diagnosis of their specific needs. However, the locally developed Mechanics and Usage tests were found to have much greater face validity than the CTBS in terms of project objectives and instruction. Thus, it was recommended that these tests be administered on a pre-post basis.

The locally developed tests were readministered during the weeks of April 2 and May 21. Analyses of covariance, with pre-test score as covariate, were completed on the first semester data. Differences yielded were not significant for Mechanics ($F = 1.630$), Usage ($F = 1.346$) or combined Mechanics/Usage ($F = 1.542$), as shown in Attachments A-4, 5, 6. The objective was not attained.

Year 3: Students participating in supplementary instruction at least seven times will attain significantly higher mean gain scores ($p < .05$) in language on the locally developed diagnostic tests than will students in the control group.

During the Summer of 1979, items were added to the Mechanics and Usage tests. Language tests administered on a pre-post basis during 1979-1980 included a total of one hundred items, ten corresponding directly to each of the (ten) units in the Target instructional materials utilized. (See Attachment B-4.) Because students worked on one or more (but not all) of these ten skills, analyses were completed using the total score (100 possible).

The analysis included results for all who had both pre- and post-scores in the two groups: MLTA participants ($N = 40$) who had been served at least seven times in language and control students ($N = 186$) who had received no MLTA service. Both groups showed significant pre-post gains. The mean gain (8.1 raw score points) for the MLTA group was significantly ($p \leq .05$) greater than that of the control group (5.7 raw score points), as shown in Attachment A-7. The objective was attained.

⁸This supplementary objective was added on the advice of the State consultant during his on-site visit, March 20, 1979.

D. Skills Mastery: Mathematics (PO-3)

Year 1: Ninety per cent (90%) of students participating in supplementary instruction in mathematics will attain at least 75% mastery in at least one skill in which that level of mastery had not been demonstrated on the pre-test. Pre- and post-tests incorporated into Project Utilize materials will be used as students begin and conclude supplementary instruction on a designated skill.

The project mathematics teachers used--on an ongoing pre-post basis--the Project Utilize embedded tests. (See Attachment B-5.) These were administered at the beginning and end of a student's work on a designated skill.

Participating students were arbitrarily defined as those who had received five or more periods of MLTA mathematics instruction. Information on participants' successful mastery of skills was submitted by teams at only three of the six project schools--A. B. Hart, Audubon, and Carl F. Shuler. Of 71 participants in these schools, 53 (75%) were reported to have mastered one or more units. On the basis of these incomplete data, it appeared that this objective was not attained during 1977-1978.

Year 2: A total of 90% of students participating in supplementary instruction in mathematics will attain at least 80% mastery in at least one skill in which that level of mastery had not been demonstrated on the pre-test.

Results of pre-post scores on Project Utilize embedded unit tests were submitted by most teachers, as proposed. However, not every MLTA mathematics teacher chose to use Project Utilize materials. The locally developed diagnostic test was readministered during the weeks of April 2 and May 21 for reasons discussed below, relevant to PO-4). These pre-post results were inspected, also, for proposed mastery--of whole numbers, common fractions, decimal fractions and/or one of the basic operations.

Because of transfers, withdrawals, etc., results were available for only 202 of 215 students served in mathematics during 1978-1979. Of those 202 participants, 166 (82.2%) showed the predicted 80% mastery in at least one skill. Among schools (seven first semester and six second semester) percentages ranged from 60.9% to 100.0%. Thus, although the proposed 90% was exceeded at two schools (Margaret Spellacy, Robert H. Jamison), this objective was not attained.

Year 3: At least 80% of students participating in supplementary instruction in mathematics at least seven times will attain at least 80% mastery in at least one skill in which the level of mastery had not been demonstrated at higher than the 50% level on the pre-test (the locally developed diagnostic test).

During 1979-1980, 75 students in five schools were served seven or more times in mathematics. Diagnostic pre-post results were submitted for 47 of these students from four of the schools. Forty (85.1%) of these demonstrated the proposed mastery of at least one of the twelve skills. Available data indicated that the objective was attained. At three of the four schools--C. W. Eliot, H. E. Davis and Margaret Spellacy --90.0%, 89.5%, and 88.9% of the students, respectively, demonstrated the proposed level of mastery in at least one skill.

E. Pre-Post Comparisons: Mathematics (PO-4)

Year 1: Results of tests in arithmetic computation . . .
 next administered citywide to seventh-grade classes of
 1977-1978 will evidence increasing percentages of
 students in the above-average "band" (stanines 7-9)
 Monitoring results of the citywide testing program,
 although the administration schedule does not coincide
 with checkpoints for project operations, should reflect
 potential effects of a small-scale project on the total
 school.

The CTBS Mathematics was administered as part of the citywide testing program--in March or April. Level 2 had been used with the sixth grade and Level 3 with the seventh (both Form S). Comparisons of the percentages of project- and control-school students scoring "above average" (stanines 7-9) on Computation in grades six and seven were, thus, possible. (See Attachment A-8.) The objective was not attained. The percentage scoring "above average" was lower for all groups in seventh grade (compared to sixth); students who had received MLTA mathematics instruction evidenced less decrease in the percentage "above average" than their classmates, but greater than those students in the three control schools.

Year 2: Students participating in supplementary
instruction in mathematics will attain significantly
higher mean post scores ($p < .05$) on the CTBS:
Mathematics Computation than will students in the
control group.

Computation scores on CTBS Mathematics (Form S) were obtained from results of citywide testing. Level 3 was administered in April, 1979 to seventh-grade students, who had completed Level 2 as sixth-graders the preceding Spring. Scores for both sixth- and seventh-grade tests were available for 109 students receiving project mathematics instruction and for 345 control students. Analysis of covariance was completed, with sixth-grade score as the covariate (See Attachment A-9.) The difference between MLTA and control students was not significant ($F = .623$); this objective was not attained.

Year 2 (Supplementary⁹): Students participating in supplementary instruction in mathematics will attain significantly

⁹This supplementary objective was added on the advice of the State consultant during his on-site visit, March 20, 1979.

higher mean post-test scores ($p < .05$) on the locally developed "Survey Test on Fundamentals" (50 items) designed in direct relationship to skills included in project treatment.

At the inception of the project, a 50-item test was developed by the Mathematics Supervisor. Three to five items were included for each type of number (whole numbers, common fractions, decimal fractions) involving each of the four basic operations (addition, subtraction, multiplication, division), as shown in Attachment B-5. This test and the Lee-Clark Arithmetic Fundamentals Survey Test (Form A) were administered in the Fall by project mathematics teachers to at least two "average" seventh-grade mathematics classes. During the Summer of 1978, analyses of these data revealed a .763 correlation between the locally developed "Survey" and the Lee-Clark. Although local survey sub-scores on clusters of problems relevant to operations and types of numbers had been intended originally for identification of potential student participants and diagnosis of their specific needs, it was decided (with the State consultant) to administer this locally developed test on a pre-post basis.

The project moved into semester-by-semester operation during 1978-1979, in anticipation of desegregation implementation involving junior high schools and to prevent loss of any pertinent data. The locally developed "Survey" was readministered by mathematics team members during the weeks of April 2 and May 21. Pre-post scores on the local instrument were available for 120 students served in project mathematics instruction and 308 control students. The analysis of covariance yielded a significant difference ($F = 25.326$) favoring the project students. These findings (presented in Attachment A-10) indicated that this objective was attained.

Year 3: Students participating in supplementary instruction in mathematics at least seven times will attain significantly higher mean gain scores ($p < .05$) in mathematics computation on the locally developed diagnostic test than will students in the control group.

Pre- and post-test scores on the Mathematics Survey were available for 62 MLTA students (who had been served at least seven times in mathematics) and 228 controls (who had received no project service). Both groups evidenced significant pre-post gains. The average gains, however, were almost identical (6.879/6.872) for the MLTA and the control groups. The $t = .075$ for the difference between MLTA and control students' mean gains was not significant. The interpretation of this result was clouded because the mean scores of the two groups on the pre-test were quite dissimilar (as shown in Attachment A-11). Nevertheless, it seems clear that this objective was not attained.

F. Affective Aspects

Because of recognized interactive effects of cognitive and affective aspects, the guidance component constituted an important component of the project model. Furthermore, efforts were made to

evaluate affective aspects of MLTA in spite of acknowledgement--by State reviewers/consultant and LEA personnel--"that"...interests, attitudes, and personality characteristics are assumed correctly or not to develop relatively slowly and to be visible in appraisal techniques only over long periods of time..."¹⁰ and that there is a dearth of appropriate appraisal techniques. Both the evolving objectives and the outcomes reported below reflected these concerns.

Year 1: Participating students will show significant (ly greater $p < .05$) improvements in attitude toward subject area(s) in which they have received supplementary instruction as well as the general section of the Survey (of School Attitudes) than nonparticipating seventh graders in project teachers' classes, and others from which a sample will be drawn. (PO-2.3, 1977-1978)

In the Fall and Spring, MLTA counselors administered to students participating in the project and a sample of other seventh-graders the Survey of School Attitudes (Intermediate, Form B)¹¹ with an additional locally developed section relevant especially to the guidance component of the project (a copy of which has been included as Attachment B-6).

Pre-post results for the 390 students who completed the Survey in both the Fall and the Spring were analyzed (multivariate analysis of covariance). Two runs were completed, one focusing on students served in Language and Guidance, the other on those served in Mathematics and Guidance. In both, F-ratios indicated no significant differences between the experimental group and the control students on the Survey (Reading/Language, Mathematics, local Guidance). The absence of significant differences between MLTA participants and control students (when post-means were adjusted for the covariate pre-score and unequal N's) may merely reflect the relative consistency of attitudes--especially over a period of only a few months. At any rate, the objective was not attained.

Year 1 (Continued): Attendance and retention rates for participating students will equal or exceed that for the total seventh grade in each project school. (Reflected in this "attendance rate" is frequency of truancy, as well as illness, etc.) (PO-2.4, 1977-1978)

¹⁰ David R. Krathwohl; Benjamin S. Bloom; and, Bertram B. Masia, Taxonomy of Educational Objectives: Handbook II, Affective Domain. New York: David McKay, 1956.

¹¹ The publisher reported split-halves/alpha-coefficient reliabilities of .80 on the Reading/Language section and .89 on Mathematics, based on responses of 1,075 seventh graders. Thomas P. Hogan, Survey of School Attitudes: Manual for Administering and Interpreting. New York: Harcourt Brace Jovanovich, 1975, p. 8.

Attendance data for project participants through the third marking period (April 7, 1978) were reported by teams, with the assistance of the project clerk. Comparison data for seventh grades in project schools were compiled by the evaluator from monthly reports each school had submitted to Child Accounting, Division of Attendance and Automated Pupil Records--covering the same time period (first through third marking period). The retention rate for project participants was defined/calculated as the per cent of pre-tested MLTA students who were post-tested in mid-May. This rate was compared with the seventh grade rate for each school for the first semester (only information available at the time).

School-by-school data have been summarized in Table 4. The attendance information for the first three marking periods--which included all but the last week of MLTA teams' work with students--showed that participants' attendance rates exceeded their schools' seventh grade rates by three-to-six per cent. The objective for attendance was attained.

In five of the six schools, the percentage of participating students post-tested in mid-May (therefore considered "retained") exceeded the seventh-grade rate for the first semester. The fact that the MLTA-student rate was based on approximately 15 more weeks of school than the seventh-grade rate and school-leavings do tend to continue throughout the year may have attenuated these results. Nevertheless, available data indicated that the objective for retention was attained in only five of the six project schools.

TABLE 4

ATTENDANCE/RETENTION DATA: 1977-1978

SCHOOL	ATTENDANCE RATES*		RETENTION RATES**	
	MLTA	GR. 7	MLTA	GR. 7
A. B. HART	85.68%	80.76%	93.02%	91.92%
AUDUBON	92.63%	87.31%	95.08%	93.03%
C. F. SHULER	94.09%	90.22%	93.22%	88.96%
J. M. GALLAGHER	88.14%	82.53%	100.00%	89.86%
LINCOLN	92.67%	77.85%	100.00%	87.34%
R. H. JAMISON	94.36%	91.31%	92.96%	95.29%

*Attendance rate = ratio of days attended to days enrolled from the opening of school through the third marking period (April 7, 1978).

**Retention rate = ratio of number of students remaining enrolled by mid-May post-testing for MLTA or by the end of the first semester (January 27, 1978) to the original enrollment numbers.

Year 2: At least 80% of students participating in supplementary instructional sessions in language and/or mathematics will express a positive attitude on a locally developed survey form toward the supplementary instruction received. (FO-1.5, 1978-1979.)

Project students completed a survey (Attachment B-7) administered by MLTA counselors near the end of each semester, when English and mathematics teachers were administering post-tests in language and computation. Completed surveys were submitted to the evaluator for compilation of responses. Surveys were completed by 359 students who had been instructed to complete only sections pertinent to area(s) of MLTA service they had received. In each section (Language, Mathematics) four of the six descriptors were "positive," or favorable to MLTA instruction. (A complete summary of responses has been included in Attachment C-7.)

Of the 199 students responding to the language section, 158 (79.4%) marked at least one of the four choices considered "positive." The most frequently selected (52.8%) was that indicating that the MLTA instruction "helped me understand the regular classwork better." Of 276 MLTA mathematics students, 240 (87.0%) marked one or more of the four "positive" descriptors. Most often marked--by 135 (48.9%)--again was that reflecting better understanding of regular classwork. Combined data for language and/or mathematics students (a few having received MLTA instruction in both areas) showed 83.7% of the project participants had marked at least one of the "positive" choices. The objective was considered attained.

Although not incorporated into the objective, students' responses to the survey section relevant to MLTA supplementary guidance were of interest. Of 359 participants marking this item, 343 (95.5%) marked one or more of the five "positive" choices. Four responses were selected more frequently than the others: "let me express my opinions and feelings more than in other classes" (46.2%); "made me feel that schoolwork is more important than I'd thought" (40.6%); "was interesting all--or most of--the time" (39.3%); and, "caused me to think more about my plans for the future" (39.0%). Several (36.8%) indicated that the supplementary guidance "helped me do better in other classes." Students seemed to perceive guidance component as valuable.

Year 3: At least 80% of the students participating in supplementary instructional sessions in language and/or mathematics at least seven times will express a positive attitude toward the supplementary instruction received. (PO-5, 1979-1980.)

Surveys (Attachment B-7) were submitted for a total of 160 participating students from six of the seven project schools. The 1979-1980 response summary has been incorporated into Attachment C-7, with results from 1978-1979.

Of 70 students completing the section on language instruction, 52 (74.3%) marked one or more of the four "positive" choices. Again during 1979-1980, the most frequently selected response (53.3%) was "helped me understand the regular classwork better." Of 73 students responding to the mathematics section, 61 (83.6%) marked one or more of the "favorable" choices. Most frequently selected was "very valuable to me" (37.6%), with "helped me understand the regular classwork better" (35.3%) next-most-often marked. Among the total of 143 students marking the language and/or mathematics sections of the survey, 113 (79.0%) marked one or more of the four "favorable" responses--suggesting "a positive attitude toward the supplementary instruction received." Since anonymously completed surveys could not be matched with records of number of times served in language and/or mathematics, it is possible to conclude only that this objective was very probably attained.

Most responding students (92.2%) again reported a positive attitude toward the guidance component of MLTA. The most frequently marked (by 43.4%) descriptor stated that MLTA guidance "made me feel that school work is more important than I'd thought." Approximately one fourth of the 1979-1980 respondents (24.3%) indicated that project guidance "helped me to do better in other classes."

V. DISSEMINATION

Dissemination was an important project goal and an integral part of project operations from the beginning. Throughout the three years, the project manager maintained communications with all appropriate central-office administrators, supervisors, junior high school principals/teachers/counselors involved with, or interested in, MLTA. Frequent informational memoranda and status reports were supplemented with countless informal contacts, by telephone and in person.

In project schools, participating students (and staff team-members) wore colorful MLTA buttons (about 2½" in diameter). Teams sent letters to parents, so they would know about their child's involvement with the project and feel free to observe/inquire to learn more about it. School newspapers publicized MLTA. Project teams--often with the manager--participated in school/community events, such as open houses and PTA meetings. The manager met also with prospective teams/team members, English/mathematics departments, entire faculties to inform them about MLTA.

Information about MLTA was disseminated systemwide--and farther--in a variety of ways. The project manager made formal presentations about MLTA at meetings of secondary principals, English teachers/chairpersons, mathematics teachers/chairpersons, and counselors. She accepted an invitation from (Ohio Department of Education) Urban Pilot Project to inform their staff about MLTA (February 24, 1978). Elementary teachers involved with the (Title IV-C) Calculator Project learned about this project "in reverse"--

through their manager's providing inservice for MLTA (February 14, 1978). The project received attention in the Superintendent's Bulletin (weekly) and "The Project" (compensatory education newsletter), as well as one metropolitan daily--The (Cleveland) Plain Dealer (May 14, 1979).

Attempts to establish a viable Community Communications Council were eventually abandoned. Members were appointed according to established systemwide administrative procedures, and the manager sent them information about MLTA. Poor attendance at the January 25, 1978 meeting and apparent lack of interest precluded active involvement of the Council with this project.

However, MLTA information went to and beyond the Cleveland area in additional ways. Mastery-learning consultants in town to provide project-wide inservice for MLTA teams carried back to Lorain, Ohio and Chicago, Illinois greater understanding of the project. State consultants from the Division of Planning and Evaluation learned about MLTA through on-site visits, as well as the manager's monthly reports and her participation in State meetings (Spring Conference, Title IV-C Project Managers, etc.).

News of MLTA traveled still further. On May 31, 1978, the project was visited by four Indonesian educators who had received a grant through UNESCO to observe mastery learning projects in the United States and South Korea. In October, 1979, the project manager participated in a mastery-learning consultant seminar in Chicago attended by nationwide representatives of projects reflecting theories of mastery learning. She served on the planning committee--and participated in--the subsequent Mastery Learning Network Conference held in New Orleans, Louisiana, from January 31, through February 3, 1980. These sessions led to the organization of NOBS (Network for Outcome Based Schools), the October meeting of which--in Denver--the manager attended. (See Phase-In.)

More recently, the project manager has been invited by the Department of Curriculum and Instruction and by the (Desegregation) Ability Grouping Committee to make presentations to Cleveland Public Schools personnel. Additional details of these dissemination sessions with administrators/supervisors and with selected secondary English teachers have been noted later--relevant to phase-in, to which these are more pertinent. The manager and the Procedural Manual have been--and will continue to be--major "instruments" for dissemination and project phase-in.

VI. CONCLUSIONS/RECOMMENDATIONS

Like other projects funded under ESEA Title IV-C, MLTA was designed for developing and implementing in a realistic setting

"...effective innovative practices/products...,¹² namely a team approach for promoting increased mastery of basic language/mathematics skills by seventh-grade students. Information relevant to implementation and success of the proposed MLTA model from the Fall of 1977 through the Summer of 1980 has been presented in Sections III (Program Descriptions) and IV (Project Outcomes). However, conclusions and recommendations noted below were necessarily impacted by unpredictable and unprecedented features of that realistic situation mentioned in the guidelines.

A. Conclusions

As reported regularly to the Division of Evaluation and Planning, the project has been plagued by conditions far beyond the control of the school system, let alone this project. Upheavals and uncertainties (monetary and judicial, especially) prevailed--in annual school calendars, in staff assignments (to classes, schools, positions), in student schedules. Several of Mr. Murphy's notable "laws" were painfully applicable.

- During 1977-1978, the MLTA tape recorders (ordered in September) did not arrive until February; teachers were still being reassigned according to Court Order in October--and later; schools experienced unusual scheduling problems; some staffs boycotted classes because of "payless paydays" during late Fall/early Winter. The manager noted the loss of four team members (different schools) in her February report. Team members' unassigned periods were required for class-coverage, when substitutes (frequently) were not available. "Everything takes longer than you think," even on a revised project timeline.
- The following year, a six-week work stoppage essentially delayed the opening of school until mid-October. Mid-year reorganization problems--including staff transfers--within at least seven (more than half) of the junior high schools were exacerbated by the Court-approved closing of Addison Junior High School as part of the system's voluntary desegregation plan. (The Court had issued a liability opinion against the school system at the end of August, 1976, and a remand opinion/remedial order in February, 1978--as documented in Attachment C-10.) Teachers' unassigned periods for MLTA continued to be usurped for class-coverage. "Nothing is as easy as it looks."

¹²Ohio Guidelines for Innovative and Support Projects (ESEA Title IV, Part C), op. cit., p. 2.

- Despite these complications, project implementation was generally improved during 1978-1979; but the situation worsened the following year. A strike beginning on October 18 resulted in the closing of schools on November 7; they reopened on January 4, 1980. Phase I of Desegregation Implementation affected some junior high schools in the Fall of 1979 (three of the seven in MLTA); the rest were impacted when Phase II took effect at the beginning of the second semester, on March 17, 1980. (See Attachment C-10.) Students and staff--including several team members--were shuffled once again; many mathematics teachers were assigned an additional class; a desegregation mandated activities period took teachers' unassigned periods and students' study halls (needed for MLTA instruction). "Whatever can go wrong will."

Feasibility.--These unprecedented events of the past three years in the Cleveland Public Schools made it extremely difficult for staff and students to carry on with the "regular" programs, let alone to implement a special undertaking such as MLTA, which demanded more "extra measures of devotion" than most could/would muster. The project manager had no control over the extent to which the proposed model was actually implemented in any given school. The feasibility of successfully implementing the proposed team approach for promoting seventh-grade students' language/mathematics skills mastery was, nevertheless, demonstrated. The manager and evaluator observed each year--in a certain school's program, a given team's apparent grasp of and enthusiasm for this approach to helping seventh-graders achieve, an enthusiastic student's demonstration of the Classmate 88 Calculator, etc.--that, despite unpropitious conditions, "the model can work."

- One 1978-1979 example was Margaret Spellacy Junior High School, where the English and mathematics teachers and the counselor involved with the project were assigned the same seventh-grade sections for English/mathematics and, with some further schedule arranging by the principal, were unassigned during one or more periods when these students/sections had study hall. Perhaps because Margaret Spellacy remained the junior high school servicing the one "natural" school-cluster (requiring no cross-town matching of schools and transporting of students) in the system-wide, Court-required desegregation plan. Or perhaps because of administrative and teaching staff commitment to MLTA, the disruptions of 1978-1979 did not prevent this team from providing project service at an above-average level--in extent and intensity. Moreover, above-average proportions of participating students demonstrated the levels of mastery proposed in the performance objectives. In a May 2, 1980 Status Report, the project manager accurately described this team as "one of the strongest and most consistently successful."

- During the first semester of 1979-1980, a new project team at Charles W. Eliot Junior High School, also, operated at the "model" level with 27 students. Conditions far beyond this team's and the project's control made it impossible to continue with MLTA on a formal basis for the entire school year. During that first semester, however, project services were provided at an above-average level, and above-average proportions of participating students showed the proposed mastery gains.

In retrospect, it seemed that the more effectively teams learned to function, the greater became the counterproductive forces beyond MLTA control. It was not surprising that the project manager concluded a May 2, 1980 status report with the following statement: "Evaluation results...will, at best, reflect spotty, and fairly inconsistent, project service."

Outcomes.--Evidence indicated that project goals were reached, in spite of adverse conditions. Participating students sometimes showed the gains in mastery of specified language and mathematics skills proposed in the first goal. The proposed team model, including cognitive and affective components, was developed, tested and refined (goal two). The third goal has been and will continue to be, attained: the Procedural Manual (1980 Revision) was prepared for purposes of continuation and dissemination.

In relation to the performance objectives, the outcomes were, as the manager expected, somewhat spotty. Each year, in language and mathematics, some participating students in some--if not all--schools demonstrated at the proposed level mastery of at least one skill in which a prior deficiency had been evident. Although findings over the three-year period did not reveal any "neat" correspondence between implementation variables (frequently not controllable) and extent to which objectives were attained, the schools cited earlier for level of implementation--Margaret Spellacy in 1978-1979 and Charles W. Eliot in 1979-1980--represented the only reported instances during those years of MLTA students' exceeding proposed mastery levels in both language and mathematics. In comparison with control students, participating students (gains/post-scores on locally developed, project-instruction-specific tests) occasionally excelled project-wide--in mathematics (1978-1979) and language (1979-1980). Student reactions to MLTA instruction were as favorable as proposed--slightly more to mathematics than to language and especially to the guidance component (although short-term changes in student attitudes, if any, were not reflected by the standardized instrument utilized during 1977-1978). The Procedural Manual was developed, used, evaluated, and revised--for continuation and dissemination.

In this type of project for which Title IV-C funding is intended and through which "innovative practices/products" are to be developed, the inconsistent results may prove to be more enlightening than disappointing. The fact that some teams could "get results" in spite of extremely adverse conditions demonstrates that the model can

"work." What enlightenment has come over the past three years has been crystallized in the following recommendations.

B. Recommendations

As suggested just above, the recommendations are based not only on the quantitative outcomes but also--and perhaps even more validly--on qualitative information gathered both systematically and less formally by the manager and evaluator from supervisors/administrators and, mainly, team members with experience implementing the model "in a realistic setting." Team members' comments, along with project outcomes/conclusions and manager/evaluator observations, suggest three basic recommendations for anyone considering implementing an MLTA program. (All responses of team members to open-ended questions on two occasions are presented verbatim in Attachments C-8 and E--question six, in particular--from which quotations below have been excerpted.)

- ▶ Be assured that "the key to a successful MLTA experience is commitment...."
- Assess potential team members' initial commitment to the axiom that all students can learn--in different ways, at different rates, etc. (Consider selecting staff on the basis of 'prior commitment.')
- "...Inservice training for all teachers...needs to be a priority," and its length/content should be differentiated not so much by discipline as in relation to individuals' 'entry-level points-of-view' pertinent to the above axiom. "The MLTA concept should be internalized...."
- Insist upon administrative as well as a team-member commitment of time--the frequency and duration of MLTA services must be defined and "...built into the master schedule....," so that:
 - the team members can "...set up a workable routine with the students and stick with it," since "consistency is of prime importance to the student";
 - "a strong team approach" can be developed and maintained--possibly "...an entirely new approach to secondary school faculties who rarely share classroom assignments."
- ▶ "Carefully select pupils"; "choose students of average ability"; start with a small group; "choose willing-to-learn students at first." ("Groups of three or four seemed to work best. The hard part is keeping down to this number; once they start [ed], students wanted to come almost every day for more work.")

- "Plan ahead." "Read instructions thoroughly and go over equipment.... Anticipate reactions and problems that might arise." "Read the Guide [Procedural Manual]. Attend meetings." "Use the ideas in the book." "Take advantage of the equipment and the very small group situation." "Know exactly what you are trying to accomplish."

Within the Cleveland Public School System, it is recommended--in addition to the above--that:

- Former MLTA team members be encouraged to continue to implement project strategies--in the model (team) format, as possible, and in regular classroom situations;
- Staff development in various subjects/at various educational levels promote the concept of mastery learning and provide appropriate "practical" instructional techniques/procedures with the former manager and team members serving as consultants;
- Copies of the Procedural Manual and pre-/in-service training be made available without charge for English/mathematics teachers and counselors interested in phasing MLTA into the ongoing program;
- "Mastery learning strategies...be utilized in other subject areas and...be continued as part of a school wide effort, especially under the desegregation programs."

VII. PROJECT PHASE-IN

A. Continuation Efforts

As noted earlier (Section V), dissemination activities blended into continuation--especially during the Spring of 1980. The manager formally initiated the continuation phase with a presentation to supervisors/administrators at an April 14 meeting sponsored by the (Desegregation) Ability Grouping Committee. On May 14, she shared the MLTA philosophy and strategies with secondary English teachers involved with the Basic English Skills Project.

The Directing Supervisor, Compensatory Education, delegated the former project manager to represent the Cleveland Public Schools at two recent meetings in Denver, Colorado. On October 14-15, 1980, she met with NOBS (Network for Outcome Based Schools--an outgrowth of the October, 1979 and February, 1980 conferences mentioned under Dissemination). On October 16-17, she participated in the Mastery Learning Institute sponsored by ASCD (Association for Supervision and Curriculum Development).

Important to continuation are this former project manager and team members who comprise a cadre of staff experienced with MLTA and, thus, prepared to assist with continuation. (Costs of staff time, equipment, published materials, etc., will be the same as during Title IV-C, plus any inflationary increases.) Responses to item five of the June, 1980 Follow-Up Survey (Attachment E) suggest that mastery learning strategies are currently more likely to be continued by MLTA counselors and mathematics teachers, more probably as individuals than as team members. It was one of those individuals--a mathematics teacher (with three semesters of MLTA experience)--who was quoted earlier about the importance of mastery-learning strategies, especially in a school system undergoing court-ordered desegregation.

Mandates of the Federal Court relevant to strengthening educational programs to insure every child's optimal achievement provide the best insurance of MLTA's continuation. The students are now in school, as of September 29. Reorganization under the Desegregation Administrator (installed by the Court on August 15, 1980) continues. Although administrators/supervisors and funding sources responsible for the continuation of MLTA cannot be specified at this writing, the Deputy Superintendent recently named to head the new Department of Research, Development and Evaluation confirms the unique role MLTA strategies will play in the systemwide thrust for every student's maximal progress in a desegregated school system.

B. Phases To Be Discontinued

It is anticipated that certain activities--included in 1977-1980 MLTA operations primarily for documentation of project service to students and collection of test results relevant to performance objectives, as part of the Title IV-C evaluation design--will be discontinued. These include:

- systematic reporting of team meetings at schools;
- periodic reporting of student service/attendance data;
- completion of student survey near the end of each semester;
- readministration of diagnostic tests near the end of each semester;
- formal (statistical) analyses;
- revision of Procedural Manual.

C. Equipment Inventory

During September/October, 1977, seven Monroe Classmate 88 Calculators were purchased (@ \$745). The serial numbers were as follows: F071998, F072107, F072108, F072118, F072133, F072136, and F072154. (All other equipment cost less than \$300 per unit.)

D. Equipment Not Required for Phase-In

All MLTA equipment is still needed.

ATTACHMENT A

MASTERY LEARNING: TEAM APPROACH

STATISTICAL TABLES

	Page
1. Per Cent of Eighth-Grade Students Scoring in Each Stanine Band (CTBS, Citywide)	30
2. Comparison of Percentage of Served/Non-Served Students Scoring "Above Average" (CTBS - Language)	31
3. Covariance, 1978-1979: CTBS Language	32
4. Covariance, 1978-1979: (Local) Mechanics	33
5. Covariance, 1978-1979: (Local) Usage	34
6. Covariance, 1978-1979: (Local) Mechanics/Usage	35
7. Comparison of Served/Non-Served Students on Language Mechanics/Usage Test.	36
8. Comparison of Served/Non-Served Students Scoring "Above Average" (CTBS - Mathematics)	37
9. Covariance, 1978-1979: CTBS Mathematics Computation.	38
10. Covariance, 1978-1979: (Local - Mathematics) Survey.	39
11. Comparison of Served/Non-Served Students on Mathematics Survey of Fundamentals.	40

ATTACHMENT A-1

MASTERY LEARNING: TEAM APPROACH

COMPREHENSIVE TESTS OF BASIC SKILLS: CITYWIDE TESTING

PER CENT OF EIGHTH-GRADE STUDENTS IN NINE-SCHOOL CLUSTER
SCORING IN EACH STANINE BAND (NATIONAL NORMS)

STA- NINE BAND	NUMBER TESTED EXPECTED PER CENT (NATIONAL NORMS)		LANGUAGE ¹ MECHANICS (Mar., 1976)	MATHEMATICS ² COMPUTATION (Dec., 1976)
		RANGE	230 - 380	211 - 446
		MEDIAN	338	302
ABOVE-AVERAGE (STANINE 7-9)	23%	RANGE	3.0 - 12.2%	14.9 - 27.8%
		MEDIAN	4.7%	20.2%
AVERAGE (STANINE 4-6)	54%	RANGE	47.0 - 61.6%	61.8 - 73.7%
		MEDIAN	57.7%	66.1%
BELOW-AVERAGE (STANINE 1-3)	23%	RANGE	28.8 - 49.0%	9.0 - 17.5%
		MEDIAN	36.9%	11.8%

¹Bulletin No. 61-B, Results: CTBS Language Test, Level 3, Form Q, Cleveland (Ohio) Public Schools, Division of Research and Development, 1976.

²Bulletin No. 37-A, Results: CTBS Mathematics Test, Level 3, Form S, Cleveland (Ohio) Public Schools, Division of Research and Development, 1977.

ATTACHMENT A-2

MASTERY LEARNING: TEAM APPROACH--1977-1978

COMPARISON OF PERCENTAGE OF STUDENTS SCORING
 "ABOVE AVERAGE" (STANINES 7-9) ON CTBS:
 LANGUAGE MECHANICS IN GRADES 6 AND 7
 (FORM Q; NATIONAL NORMS)

GRADE AND TEST LEVEL	PROJECT SCHOOLS		CONTROL SCHOOLS
	LANGUAGE -SERVED	NON- SERVED	
NO. OF STUDENTS	48	81	45
GRADE 6: Level 2	2.1%	19.8%	20.0%
GRADE 7: Level 3	4.2%	8.6%	8.9%

ATTACHMENT A-3

MASTERY LEARNING: TEAM APPROACH--1978-1979

ANALYSIS OF COVARIANCE OF MLTA AND CONTROL STUDENTS ON
CTBS LANGUAGE (MECHANICS PLUS FIRST TEN ITEMS OF USAGE)
POST-TEST USING PRE-TEST SCORES AS COVARIATE

SOURCE OF VARIATION	df	MS	F	p
Covariate	1	3664.217	150.107	.001
Between	1	.300	.012	.999
Within/Error	262	24.411		
Total	264	38.107		

GROUP	N	POST-TEST MEANS	
		UNADJUSTED	ADJUSTED
MLTA	66	17.18	17.94
Control	199	18.11	17.86

ATTACHMENT A-4

MASTERY LEARNING: TEAM APPROACH--1978-1979

ANALYSIS OF COVARIANCE OF MLTA AND CONTROL
STUDENTS ON (LOCAL) MECHANICS POST-TEST
USING PRE-TEST SCORES AS COVARIATE

SOURCE OF VARIATION	df	MS	F	p
Covariate	1	1859.744	46.677	.001
Between	1	64.956	1.630	.200
Within/Error	275	39.843		
Total	277	46.503		

GROUP	N	POST-TEST MEANS	
		UNADJUSTED	ADJUSTED
MLTA	51	22.29	23.56
Control	227	22.46	22.28

ATTACIMENT A-5

MASTERY LEARNING: TEAM APPROACH--1978-1979

ANALYSIS OF COVARIANCE OF MLTA AND CONTROL
STUDENTS ON (LOCAL) USAGE POST-TEST USING
PRE-TEST SCORES AS COVARIATE

SOURCE OF VARIATION	df	MS	F	p
Covariate	1	904.610	28.914	.001
Between	1	42.120	1.346	.245
Within/Error	268	31.286		
Total	270	34.561		

GROUP	N	POST-TEST MEANS	
		UNADJUSTED	ADJUSTED
MLTA	52	25.80	26.81
Control	219	28.09	27.85

ATTACHMENT A-6

MASTERY LEARNING: TEAM APPROACH--1978-1979

ANALYSIS OF COVARIANCE OF MLTA AND CONTROL STUDENTS
ON (LOCAL) MECHANICS/USAGE POST-TEST USING
PRE-TEST SCORES AS COVARIATE

SOURCE OF VARIATION	df	MS	F	p
Covariate	1	7500.953	98.043	.001
Between	1	117.983	1.542	.213
Within/Error	247	76.507		
Total	249	106.490		

GROUP	N	POST-TEST MEANS	
		UNADJUSTED	ADJUSTED
MLTA	48	48.17	51.49
Control	202	49.72	50.11

ATTACHMENT A-7

MASTERY LEARNING: TEAM APPROACH--1979-1980

COMPARISON OF MLTA STUDENTS (SERVED IN
LANGUAGE) WITH CONTROL STUDENTS (RECEIVING
NO MLTA SERVICE) ON LANGUAGE MECHANICS/USAGE TEST

	N		PRE-TEST		POST-TEST		GAINS		Pre- Post t	Signi- ficance Level
	STDS.	SCHS.	M	SD	M	SD	M	SD		
MLTA	40	5	51.875	10.731	59.475	11.667	8.100	6.034	8.383	.01
CONTROL	186	6	51.473	11.789	57.194	11.654	5.715	9.462	10.074	.001
Between groups t			.2089		1.110		2.003			
Significance Level			NS		NS		.05			

ATTACHMENT A-8

MASTERY LEARNING: TEAM APPROACH--1977-1978

COMPARISON OF PERCENTAGE OF STUDENTS SCORING
 "ABOVE AVERAGE" (STANINES 7-9) ON CTBS:
 MATHEMATICS COMPUTATION
 IN GRADES 6 AND 7
 (FORM S; NATIONAL NORMS)

N, GRADE AND TEST LEVEL	PROJECT SCHOOLS		CONTROL SCHOOLS
	MATH.- SERVED	NON- SERVED	
NO. OF STUDENTS	119	90	48
GRADE 6: Level 2	35.3%	48.9%	29.2%
GRADE 7: Level 3	16.8%	24.4%	20.8%

ATTACHMENT A-9

MASTERY LEARNING: TEAM APPROACH--1977-1978

ANALYSIS OF COVARIANCE OF MLTA AND CONTROL STUDENTS ON
CTBS MATHEMATICS COMPUTATION POST-TEST USING
PRE-TEST SCORES AS COVARIATE

SOURCE OF VARIATION	df	MS	F	p
Covariate	1	14832.596	216.047	.001
Between	1	42.741	.623	.999
Within/Error	451	68.655		
Total	453	101.189		

GROUP	N	POST-TEST MEANS	
		UNADJUSTED	ADJUSTED
MLTA	109	29.41	29.85
Control	345	30.71	30.57

ATTACHMENT A-10

MASTERY LEARNING: TEAM APPROACH--1977-1978

ANALYSIS OF COVARIANCE OF MLTA AND CONTROL STUDENTS ON
(LOCAL MATHEMATICS) SURVEY POST-TEST USING
PRE-TEST SCORES AS COVARIATE

SOURCE OF VARIATION	df	MS	F	p
Covariate	1	22363.165	511.137	.001
Between	1	1108.077	25.326	.001
Within/Error	425	43.752		
Total	427	98.515		

GROUP	N	POST-TEST MEANS	
		UNADJUSTED	ADJUSTED
MLTA	120	32.83	33.74
Control	308	30.50	30.14

ATTACHMENT A-11

MASTERY LEARNING: TEAM APPROACH--1979-1980

COMPARISON OF MLTA STUDENTS (SERVED IN
MATHEMATICS) WITH CONTROL STUDENTS (RECEIVING
NO MLTA SERVICE) ON MATHEMATICS SURVEY OF FUNDAMENTALS

	N		PRE-TEST		POST-TEST		GAINS		Pre- Post t	Signi- ficance Level
	STDS.	SCHS.	M	SD	M	SD	M	SD		
MLTA	62	5	30.629	8.270	37.468	8.795	6.839	6.067	8.804	.001
CONTROL	228	6	24.487	9.852	31.390	10.229	6.772	6.777	15.056	.001
Between-groups t			4.935		4.623		.075			
Significance Level			NS		NS		NS			

ATTACHMENT B

MASTERY LEARNING: TEAM APPROACH

SAMPLE INSTRUMENTS; TEST/INSTRUCTIONAL CONTENT

	Page
1. Project-wide Inservice Reaction Sheet	42
2. Team Meeting Report	43
3. Monthly Student Service/Attendance Report Form (page two)..	44
4. Language Mechanics/Usage Skills in Target Materials	45
5. Mathematics Skills in Project Utilize Materials and Survey of Fundamentals	46
6. <u>Survey of School Attitudes</u> : Locally-developed Section	47
7. MLTA Student Survey	48

ATTACHMENT B-1

MASTERY LEARNING: TEAM APPROACH

PROJECT-WIDE INSERVICE REACTION SHEET

MLTA PROJECT-WIDE INSERVICE REACTION SHEET

1979-1980

DATE _____

Instructions: Please circle one number to the right of each item, to record your evaluation of today's program.

I. OVERALL IMPRESSION OF TODAY'S SESSION IN
RELATION TO PROJECT GOALS AND OBJECTIVES 1 - 2 - 3 - 4 - 5

II. EXTENT TO WHICH TODAY'S SESSION PROVIDED:

A. useful information/knowledge 1 - 2 - 3 - 4 - 5

B. helpful materials/ideas 1 - 2 - 3 - 4 - 5

C. enough time for questions, exchange of ideas, etc. ... 1 - 2 - 3 - 4 - 5

III. COMMENTS: _____

Please X the appropriate box to "identify yourself."

☐ Mathematics Teacher ☐ English Teacher ☐ Counselor

☐ (Asst.) Principal ☐ Supervisor ☐ Other: _____

ATTACHMENT B-2

MASTERY LEARNING: TEAM APPROACH

TEAM MEETING REPORT

MLTA TEAM MEETING REPORT DATE _____ SCHOOL _____

1. Were all team members present? (Circle.) YES NO
If NO, list absentees. _____

2. Were others present? (Circle.) YES NO
If YES, X in appropriate box(es).

☐ Project Manager ☐ Supervisor ☐ (Asst.) Principal

☐ Evaluator ☐ Other: _____

3. List the team's major accomplishment(s) at this meeting.

NOTE: The team leader should complete this report and return it via school mail immediately after each team meeting to: Miss Patricia A. Bowman, Room 133, West Technical High School.

ATTACHMENT B-3

MASTERY LEARNING: TEAM APPROACH

MONTHLY STUDENT SERVICE/ATTENDANCE REPORT FORM
(page two)

MLTA MONTHLY REPORT FROM _____ AT _____
 (teacher/ counselor) (school)
 MONTH _____

1. Of what use has each section of the MLTA Procedural Manual been to you this month? (Circle.)

		LITTLE	SOME	GREAT
GENERAL		1 - 2 - 3 - 4 - 5		
MATHEMATICS	N/A	1 - 2 - 3 - 4 - 5		
ENGLISH	N/A	1 - 2 - 3 - 4 - 5		
GUIDANCE I (1979)	N/A	1 - 2 - 3 - 4 - 5		
GUIDANCE II (1978)	N/A	1 - 2 - 3 - 4 - 5		

2. To what degree has each of the following instructional items been useful to your students this month? (Circle.)

		OF LIT- TLE USE	USEFUL	VERY USEFUL
TARGET MECHANICS/USAGE:				
Worksheets	N/A	1 - 2 - 3 - 4 - 5		
Cassettes	N/A	1 - 2 - 3 - 4 - 5		
PROJECT UTILIZE:				
Worksheets	N/A	1 - 2 - 3 - 4 - 5		
Guide (games, activities, etc.)	N/A	1 - 2 - 3 - 4 - 5		
CLASSMATE 88 CALCULATOR	N/A	1 - 2 - 3 - 4 - 5		
HAND-HELD CALCULATORS	N/A	1 - 2 - 3 - 4 - 5		
TAPE RECORDERS	N/A	1 - 2 - 3 - 4 - 5		
FILMS/FILMSTRIPS	N/A	1 - 2 - 3 - 4 - 5		
OTHER: _____		1 - 2 - 3 - 4 - 5		
_____		1 - 2 - 3 - 4 - 5		

3. Identify one activity from your section of the Procedural Manual (by name, page, etc.) which you have utilized this month and indicate briefly your success with it.

4. Describe briefly and indicate your success (or lack of it) with one activity you developed/discovered and utilized this month.

ATTACHMENT B-4

MASTERY LEARNING: TEAM APPROACH

LANGUAGE MECHANICS/USAGE SKILLS IN TARGET MATERIALS

MECHANICSUNIT 1 (SHEET 2, 25 ITEMS)

- SIGNALING BEGINNINGS AND ENDS OF SENTENCES
- SIGNALING ABBREVIATIONS
- SIGNALING PROPER NOUNS AND ADJECTIVES
- SIGNALING DATES, ADDRESSES, AND PARTS OF LETTERS (CAPITAL LETTERS)

UNIT 2 (SHEET 10, 25 ITEMS)

- SIGNALING POSSESSION AND CONTRACTIONS
- SIGNALING DATES, ADDRESSES, AND PARTS OF LETTERS (COMMAS)
- SIGNALING WORDS OF DIRECT ADDRESS, INTRODUCTORY WORDS AND PHRASES, INTERRUPTERS, TAG-ON QUESTIONS
- SIGNALING APPOSITIVES
- SIGNALING ITEMS IN A SERIES

UNIT 3 (SHEET 18, 20 ITEMS)

- SIGNALING COMPOUND SENTENCES
- SIGNALING ADVERB CLAUSES AND PARTICIPIAL PHRASES
- SIGNALING NONESSENTIAL (NONRESTRICTIVE) ADJECTIVE CLAUSES
- SIGNALING TIME NOTATIONS AND SALUTATIONS OF FORMAL BUSINESS LETTERS
- SIGNALING STATEMENTS FOLLOWED BY A SERIES

UNIT 4 (SHEET 26, 20 ITEMS)

- SIGNALING QUOTATIONS AND DIVIDED QUOTATIONS
- SIGNALING QUOTATIONS WITHIN QUOTATIONS

UNIT 5 (SHEET 32, 20 ITEMS)

- SIGNALING TITLES OF PRINTED WORKS
- SIGNALING COMPOUND WORDS AND COMPOUND NUMBERS
- SIGNALING WITH DASHES AND PARENTHESES

USAGEUNIT 1 (SHEET 2, 10 ITEMS)

- IDENTIFYING SUBJECTS AND VERBS
- SUBSTITUTING PRONOUN SUBJECTS FOR NOUN SUBJECTS
- CHOOSING VERBS THAT AGREE WITH SUBJECTS
- IDENTIFYING COMPOUND SUBJECTS AND COMPOUND VERBS
- CHOOSING VERBS THAT AGREE WITH COMPOUND SUBJECTS JOINED BY AND
- CHOOSING VERBS THAT AGREE WITH COMPOUND SUBJECTS JOINED BY OR

UNIT 2 (SHEET 9, 10 ITEMS)

- CHOOSING PRESENT AND PAST TENSE VERBS THAT AGREE WITH SUBJECTS: FORMS OF BE
- CHOOSING VERBS THAT AGREE WITH SUBJECTS IN INVERTED SENTENCES
- CHOOSING PRESENT AND PAST TENSE VERBS THAT AGREE WITH SUBJECTS: FORMS OF HAVE, DO
- IDENTIFYING HELPING VERBS AND MAIN VERBS
- CHOOSING HELPING VERBS THAT AGREE WITH SUBJECTS: FORMS OF BE, HAVE, DO

UNIT 3 (SHEET 16, 10 ITEMS)

- CHOOSING PROPER FORMS OF IRREGULAR VERBS: SIX PATTERNS, FORTY-TWO VERBS, NINE LESSONS

UNIT 4 (SHEET 27, 10 ITEMS)

- IDENTIFYING ADJECTIVES AND ADVERBS
- CHOOSING BETWEEN ADJECTIVES AND ADVERBS
- CHOOSING SIMPLE, COMPARATIVE, AND SUPERLATIVE FORMS OF ADJECTIVES AND ADVERBS
- IDENTIFYING AND USING POSSESSIVE PRONOUNS
- IDENTIFYING DIRECT OBJECTS AND INDIRECT OBJECTS
- CHOOSING PRONOUNS USED AS OBJECTS
- IDENTIFYING OBJECTS OF PREPOSITIONS
- CHOOSING PRONOUNS USED AS OBJECTS OF PREPOSITIONS
- CHOOSING PRONOUNS USED AS PREDICATE NOMINATIVES

UNIT 5 (SHEET 36, 10 ITEMS)

- CHOOSING BETWEEN HOMONYMS THAT ARE FREQUENTLY CONFUSED: THERE/THEIR/THEY'RE, YOUR/YOURE, ITS/IT'S, TO/TOO/TO
- CHOOSING BETWEEN TRANSITIVE AND INTRANSITIVE VERBS THAT ARE FREQUENTLY CONFUSED: LIE/LAY, RISE/RAISE, SIT/SET
- CHOOSING BETWEEN ADJECTIVES AND ADVERBS AND BETWEEN PROPOSITIONS THAT ARE FREQUENTLY CONFUSED: AND/BUT, GOOD/BETTER, REAL/REALLY, ALONG/BEYOND

ATTACHMENT B-5

MASTERY LEARNING: TEAM APPROACH

MATHEMATICS SKILLS IN PROJECT UTILIZE MATERIALS
AND SURVEY OF FUNDAMENTAL

PROJECT UTILIZE (EMBEDDED) SKILL MASTERY TESTS

ITEMS-PER-SKILL

OPERATION	I. FACTS	II. WHOLE NUMBERS	III. COMMON FRACTIONS	IV. DECIMAL FRACTIONS
ADDITION	100	10	10	10
SUBTRATION	100	10	10	10
MULTIPLICATION	100	10	10	10
DIVISION	80	10	10	10

LOCALLY DEVELOPED
SURVEY OF FUNDAMENTAL
(MATHEMATICS)

ITEMS-PER-SKILL

OPERATION	WHOLE NUMBERS	COMMON FRACTIONS	DECIMAL FRACTIONS	TOTAL
ADDITION	5	5	3	13
SUBTRACTION	5	5	3	13
MULTIPLICATION	5	4	3	12
DIVISION	5	4	3	12
TOTAL	20	18	12	50

ATTACHMENT B-6

MASTERY LEARNING: TEAM APPROACH

SURVEY OF SCHOOL ATTITUDES: LOCALLY-DEVELOPED SECTION

Doing better in school  LIKE  Not Sure or Don't Care  DISLIKE	Getting a good job after graduation  LIKE  Not Sure or Don't Care  DISLIKE
63. Improving my mathematics skills  LIKE  Not Sure or Don't Care  DISLIKE	64. Having my teacher help me  LIKE  Not Sure or Don't Care  DISLIKE
65. Doing well on tests  LIKE  Not Sure or Don't Care  DISLIKE	66. Improving my writing skills  LIKE  Not Sure or Don't Care  DISLIKE
67. Working hard to learn as much as I can  LIKE  Not Sure or Don't Care  DISLIKE	68. Doing my homework if I have nothing else to do  LIKE  Not Sure or Don't Care  DISLIKE
69. Being liked by my classmates  LIKE  Not Sure or Don't Care  DISLIKE	70. Giving up when I can't get the answer  LIKE  Not Sure or Don't Care  DISLIKE
71. Being considered a leader by my classmates  LIKE  Not Sure or Don't Care  DISLIKE	72. Feeling good about myself  LIKE  Not Sure or Don't Care  DISLIKE

ATTACHMENT B-7

MASTERY LEARNING: TEAM APPROACH

MLTA STUDENT SURVEY

MLTA STUDENT SURVEY: 1977-1978

SCHOOL _____

Instructions: Mark X in each box beside any statement which applies to you. Add comments in the space provided, if you wish. Do not write your name on this paper. If you received special instruction only in English, omit Item 1. If you received special instruction only in Mathematics, omit Item 2. Complete all remaining items. Be honest!

1. The special MLTA instruction in Mathematics:

- | | |
|---|--|
| ☐ was very valuable to me. | ☐ bored me most of the time. |
| ☐ helped me understand the regular mathematics classwork better. | ☐ made me feel more confident about working with mathematics. |
| ☐ was more interesting than regular class. | ☐ wasn't available often enough. |

Comments: _____

2. The special MLTA instruction in English:

- | | |
|---|--|
| ☐ was very valuable to me. | ☐ bored me most of the time. |
| ☐ helped me understand the regular English classwork better. | ☐ made me feel more confident about completing writing assignments. |
| ☐ was more interesting than regular class. | ☐ wasn't available often enough. |

Comments: _____

3. The special MLTA Guidance "classes"--

- | | |
|---|--|
| ☐ helped me do better in other classes. | ☐ really upset me. |
| ☐ made me feel that schoolwork is more important than I'd thought. | ☐ bored me most of the time. |
| ☐ caused me to think more about my plans for the future. | ☐ let me express my opinions/feelings more than in other classes. |
| | ☐ was interesting all--or most of--the time. |

Comments: _____

4. What I liked best--or found most helpful--about being in the MLTA project was:

5. The MLTA project would be better if: _____

ATTACHMENT C

MASTERY LEARNING: TEAM APPROACH

CHARTS, FACT SHEETS, ETC.

	Page
1. Sample Team Schedule	50
2. Sample Student Schedule	51
3. Participating Schools and Team Members	52
4. Dates of Project-Wide Inservice.	56
5. Team Members' Mean Ratings of ... the MLTA Procedural Manual . .	57
6. Weeks of Project-Service in Three MLTA Areas	58
7. Student Reactions to MLTA Language/Mathematics/Guidance Instruction.	59
8. Team Members' Reactions: March 3, 1979.	61
9. Responses to End-of-Semester Staff Survey: 1978-1979.	63
10. OSMCR Fact Sheets: Desegregation.	64

ATTACHMENT C-1

MASTERY LEARNING: TEAM APPROACH

SAMPLE TEAM SCHEDULE

The principal was able to schedule the two teacher-members of the MLTA team concurrent unassigned periods (second and seventh), in coordination with the project counselor's schedule for Section 2 of seventh grade, to which the sample student (Attachment C-2) belonged. This illustrates one possibility for providing the schedule-coordination through which project implementation during the school day is greatly facilitated.

The sample team schedule below parallels the sample student schedule on the following page. The English teacher is scheduled for six classes, the mathematics teacher for five plus one period designated for chairperson's responsibilities. The counselor is scheduled for group-guidance classes (orientation, for all seventh graders) with time for individual counseling and other duties. (Wednesday from 3-4 p.m. is typically reserved for faculty and department meetings, throughout the system.) MLTA teams agree on their planning/inservice times, this group having chosen Monday "after school."

PERIOD	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1 E* M* C*	REG. GUID. 7-1		ENGLISH 7-2 ALGEBRA		
2 E M C		REG. GUID. 7-3	UNASSIGNED UNASSIGNED	REG. GUID. 7-5	
3 E M C			ENGLISH 7-1 MATHEMATICS 7-3		
4 E M C			LUNCH LUNCH LUNCH		
5 E M C			ENGLISH 7-3 MATHEMATICS 7-2		
6 E M C			ENGLISH 8-7 ALGEBRA		
7 E M C	REG. GUID. 7-2	MLTA GUID.	UNASSIGNED UNASSIGNED REG. GUID. 7-4	MLTA GUID.	MLTA GUID.
8 E M C			ENGLISH 8-4 MATHEMATICS 7-1		
9 E M C			ENGLISH 8-6 DEPARTMENT HEAD DUTIES		
10 (after school)	MLTA LOCAL TEAM MEETING		FACULTY/DEPT. MEETINGS		

* E = English Teacher, M = Mathematics Teacher, and C = Counselor on the project team.

ATTACHMENT C-2

MASTERY LEARNING: TEAM APPROACH

SAMPLE STUDENT SCHEDULE

This project student is a member of Section 2 of the seventh grade (i.e., 7-2, below). The counselor, English and mathematics teachers working with this section in regular classes belong to the MLTA team, whose schedule is shown in the preceding attachment. The student attends special project guidance weekly (* Friday, seventh period) all semester. S/he is also scheduled out of study hall and into MLTA instruction in mathematics and/or language one or more of eight periods (**) a week, for whatever number of weeks is needed.

DAY PERIOD	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
1	←----- ENGLISH 7-2 -----→				
2	←----- STUDY HALL** -----→				
3	MUSIC	PHYS. ED.	MUSIC	PHYS. ED.	PHYS. ED.
4	←----- SOCIAL STUDIES 7-2 -----→				
5	←----- MATHEMATICS 7-2 -----→				
6	←----- LUNCH -----→				
7	REGULAR 7-2 ORIENTATION GUIDANCE	←----- STUDY HALL** -----→			MLTA SPECIAL GUIDANCE
8	←----- INDUSTRIAL ARTS/HOME ECONOMICS/ETC. -----→				
9	←----- SCIENCE 7-2 -----→				

ATTACHMENT C-3

MASTERY LEARNING: TEAM APPROACH--1977-1980

PARTICIPATING SCHOOLS AND TEAM MEMBERS

SCHOOL	PRINCIPAL	PROJECT TEAM MEMBERS			1977-1978		1978-1979		1979-1980	
		MATHEMATICS	ENGLISH	GUIDANCE	SEM. 1	SEM. 2	SEM. 1	SEM. 2	SEM. 1	SEM. 2
ALEXANDER HAMILTON	Allen T. White	Wallace Havenhill	Nancy Helmrich (W2)	Dorothy Martin (W2)			X	X		
							X	X		
							X	X		
							X	X		
ALFRED BUSHNELL HART	Robert W. Knieriem Devonne Settles Winifred Albert	Donald Clark (W2) Edward Wutsch (W1,2,3)	Brenda Church (W3)	Donald Herbst Maria Baskin	X	X	X		X	X
					X	X	X	X	X	X
					X	X	X	X	X	X
					X	X	X		X	X
AUDUBON	Robert Darrah	Ronald Brahlner	Mildren Johnson Carolyn Monroe Robert Segal	Patricia Jennings	X	X				
					X	X				
					X	X				
					X	X				
CARL F. SHULER	Carmen T. Faranda	William Wambsgans	O. James Fox	Clara Thomas (W1)	X	X				
					X	0				
					X					
					X	X				
CHARLES W. ELIOT	Anthony Vitanza	Madolyn Sherrell	Marilyn Harp	Miriam Rivers					X	X
									X	X
									X	X
									X	X

(Continued on following page)

Notes: Team Member--X = full semester, 0 = part-semester

Procedural Manual Writing/Revision--(W1) = Year 1, (W2) = Year 2, (W3) = Year 3

An asterisk (*) following the name indicates team membership at more than one school--during different semesters/years.

ATTACHMENT C-3 (Continued)

MASTERY LEARNING: TEAM APPROACH--1977-1980

PARTICIPATING SCHOOLS AND TEAM MEMBERS

SCHOOL	PRINCIPAL	PROJECT TEAM MEMBERS			1977-1978		1978-1979		1979-1980	
		MATHEMATICS	ENGLISH	GUIDANCE	SEM. 1	SEM. 2	SEM. 1	SEM. 2	SEM. 1	SEM. 2
EMPIRE	William Martoccia	Starlon Dudley Alma Beverly*	Carol Turner	Mildred Williams					X X X X X	X X X X X
HARRY E. DAVIS	Daniel Drake	Myrtle Penro	Vincent Wilson	Jewell Jenkins					X X X X	X X X X
JOSEPH M. GALLAGHER	Albert W. Haessly	Eunice Kollar	Adeline Zimmerman	Margaret Hirschfield (W1)	X X X X	X X X X				
LINCOLN	Leroy Lang Joseph Sampson	Sylvia Loney (W1)	Jos. Zupancic Karen Shaw	Camilla Lundy Ronald Filkill Superia Fletcher* (W2)	X X X X	X X 0 X	X X X X			
MARGARET SPELLACY	Joseph Lesko Marian Albritton	Vera Wilson Dolores Dugan	Virginia Havens	Pearl Thompson Sandra Foster			X X X X	X X X X	X X X X	X X X X

(Continued on following page)

ATTACHMENT C-3 (Continued)

MASTERY LEARNING: TEAM APPROACH--1977-1980

PARTICIPATING SCHOOLS AND TEAM MEMBERS

SCHOOL	PRINCIPAL	PROJECT TEAM MEMBERS			1977-1978		1978-1979		1979-1980	
		MATHEMATICS	ENGLISH	GUIDANCE	SEM. 1	SEM. 2	SEM. 1	SEM. 2	SEM. 1	SEM. 2
MYRON T. HERRICK	Redelle L. Hagood	Robert Malinky Alma Beverly*	Joyce Zielaskiewicz James McMillan	Raymond F. Jasko			X	X	X	X
							X	X		
									X	
							X	X	X	X
NATHAN HALE	Luther D. Ware	James Talor Edward Sims Patricia Wyman	Irma Clayton	Lois White			X	X		
							X	X		
							X	X		
ROBERT H. JAMISON	Walter P. Olzewski	Robert Korenstein (W2,3) Deborah Muthig	Daniel Sullivan (W1) Sheila Hollinger Ann Brabson	Superia Fletcher* (W2) Mike Michney (W2) Charles Dietrich Marion House	X	X	X	X	X	X
					X	X	X	X	X	X
					X	X				
					X	X	X			
								X		
									X	
					X	X	X	X	X	X

ATTACHMENT C-3 (continued)

MASTERY LEARNING: TEAM APPROACH--1977-1980

PARTICIPATING SCHOOLS AND TEAM MEMBERS

QUANTITATIVE SUMMARY

MLTA CATEGORY	NUMBER PARTICIPATING FOR EACH NUMBER OF SEMESTERS*							TOTAL
	ONE	1½	TWO	THREE	FOUR	FIVE	SIX	
SCHOOLS	1	-	7	1	2	-	2	13
MATHEMATICS TEACHERS	3	1	11	1	-	1	2	19
ENGLISH TEACHERS	8	1	8	2	-	-	-	19
COUNSELORS	5	-	11	2	1	-	-	19

*Team members who resigned from MLTA or the Cleveland Public School System or were reassigned during a semester were counted one-half.

ATTACHMENT C-4
 MASTERY LEARNING: TEAM APPROACH
 DATES OF PROJECT-WIDE INSERVICE

	1977-1978	1978-1979	1979-1980
SEMESTER ONE			September 22
	October 1		October 6
		October 28	
	November 1	November 13	
		November 21	
	December 14		
		January 27	
SEMESTER TWO	February 14		
	March 8	March 3	March 3
	May 3		
		May 12	
		June 15	

ATTACHMENT C-5

MASTERY LEARNING: TEAM APPROACH

TEAM MEMBERS' MEAN RATINGS* OF DESIGNATED
SECTIONS OF THE MLTA PROCEDURAL MANUAL

SECTION OF MLTA MANUAL	LANGUAGE TEACHERS				MATHEMATICS TEACHERS				COUNSELORS			
	N**	78-79 Mean Rating	N	79-80 Mean Rating	N	78-79 Mean Rating	N	79-80 Mean Rating	N	78-79 Mean Rating	N	79-80 Mean Rating
GENERAL	10	3.5	7	4.0	10	2.7	13	3.4	6	3.8	8	3.5
LANGUAGE	10	3.8	18	3.9	1	2.0	1	1.0	2	1.0	0	0.0
MATHEMATICS	4	2.5	1	3.0	12	3.5	20	4.0	2	1.0	0	0.0
GUIDANCE I*	5	2.8	0	0.0	2	3.0	1	1.0	9	3.8	24	3.7
GUIDANCE II*			0	0.0			1	1.0			15	3.5

*Means are based on responses to a five-point scale with 1 = "little," 3 = "some," and 5 = "great."

**N = number of responses submitted.

*GUIDANCE I was prepared during the summer of 1978 for use by second-year MLTA teams; during the summer of 1979, GUIDANCE II was added for use the following year (when other sections were merely revised).

ATTACHMENT C-6

MASTERY LEARNING: TEAM APPROACH

WEEKS OF PROJECT-SERVICE IN THREE MLTA AREAS
REPORTED BY TEAM MEMBERS

MLTA AREA SCHOOL YEAR SEMESTER	LANGUAGE				MATHEMATICS				GUIDANCE			
	1978-1979		1979-1980		1978-1979		1979-1980		1978-1979		1979-1980	
	1	2	1	2	1	2	1	2	1	2	1	2
NUMBER OF TEAM MEMBERS REPORTING*	5	4	6	3	8*	7*	6*	5	6	5	7	6
WEEKS MLTA SERVICE PROVIDED AT OR ABOVE PROPOSED LEVEL**	6.0	7.0	5.3	6.0	5.5	5.0	7.0	8.0	8.0	11.0	9.0	9.0
	5-9	3-11	4-10	3-7	4-9	4-13	6-10	0-11	5-11	10-11	4-11	6-10
TOTAL WEEKS REPORTED	10.0	9.5	6.0	8.0	9.0	9.0	9.5	11.0	N/A	N/A	N/A	N/A
	7-11	7-13	5-10	4-10	7-11	6-13	7-10	6-12				
WEEKS PER SEMESTER MLTA SERVICE PROVIDED AT OR ABOVE PROPOSED LEVEL: 1978-1980	Median	6			Median	5			Median	9		
	Range	3-13			Range	0-13			Range	4-11		

*The number of team members is equal to the number of schools with the exceptions starred: during these three semesters, two mathematics teachers provided MLTA instruction at one participating school.

**The "proposed level" was weekly for guidance, twice-a-week for language/mathematics. The upper figure represents the approximate median/school, the lower figures (italics) the range among schools.

ATTACHMENT C-7

MASTERY LEARNING: TEAM APPROACH

STUDENT REACTIONS* TO MLTA LANGUAGE INSTRUCTIONS

SURVEY ITEM	1978-1979 (N = 199)		1979-1980 (N = 70)	
	N	%	N	%
was very valuable to me (+)	75	37.7%	20	26.7%
helped me understand the regular classwork better (+)	105	52.8%	40	53.3%
was more interesting than regular class (+)	79	39.7%	16	21.3%
bored me most of the time	56	28.1%	14	18.7%
made me feel more confident (+)	54	27.1%	17	22.7%
wasn't available often enough	33	16.6%	15	20.0%

STUDENT REACTIONS TO MLTA MATHEMATICS INSTRUCTION

SURVEY ITEM	1978-1979 (N = 276)		1979-1980 (N = 73)	
	N	%	N	%
was very valuable to me (+)	69	25.0%	32	37.6%
helped me understand the regular classwork better (+)	135	48.9%	30	35.3%
was more interesting than regular class (+)	89	32.2%	22	25.9%
bored me most of the time	38	13.8%	13	15.3%
made me feel more confident (+)	107	38.8%	21	24.7%
wasn't available often enough	41	14.8%	17	20.0%

*Sample copy of survey has been included as Attachment B-14.
Items marked (+) were considered indicative of a "positive attitude."

ATTACHMENT C-7 (continued)

MASTERY LEARNING: TEAM APPROACH

STUDENT REACTIONS TO MLTA GUIDANCE INSTRUCTION

SURVEY ITEM	1978-1979 (N = 359)		1979-1980 (N = 160)	
	N	%	N	%
helped me to do better in other classes	132	36.8%	37	24.3%
made me feel that school work is more important than I'd thought	146	40.6%	66	43.4%
caused me to think more about my plans for the future	140	39.0%	52	34.2%
really upset me	15	4.2%	4	2.6%
bored me most of the time	34	9.5%	13	8.6%
let me express my opinions and feelings more than in other classes	166	46.2%	50	32.9%
was interesting all--or most of--the time	141	39.3%	54	35.5%

ATTACHMENT C-8

MASTERY LEARNING: TEAM APPROACH

TEAM MEMBERS' REACTIONS: MARCH 3, 1979

At the March 3, 1980 projectwide inservice meeting, team members were asked to comment briefly on specific ways (if any) in which involvement with this project had contributed to fulfilling the ideals/expectations they remembered from the time they entered the teaching profession--divergent numbers of years ago.

English

The problem with this project, as with my teaching experience in general, is that I have become extremely frustrated and exasperated because the scope/funding of the project is too little/narrow to accomplish enough of my goals. There is too little time and too little money to affect too few pupils.

This job has helped to accomplish my goals because I wished to teach the basics of language structure and I wished to deal with the average child. I have often felt that the average, hard working child has been forgotten in this day of special programs for high and low achievers.

Participating in the MLTA project has helped me reach a goal of close personal contact with my students and helping them on a one-to-one basis, which was never possible before.

It has given me a better chance to show my deep concern for their learning. For their improved behavior. I have had the rare opportunity to catch problems at the exact moment they happen and work to correct them on such a delightful personal level that I am tempted to resign as a teacher (with my feelings of being flooded with students) and become a tutor! Not seriously, of course, but it has given me a glimpse of teaching-learning as it should be. I have had a glimpse of paradise.

Mathematics

My involvement in the Mastery Learning Team Approach project has been rewarding because I'm able to give my students the individual assistance needed for their learning process and achievement.

This has helped students to work to their potential and to realize there might actually be someone who cares about them, not their numbers (IQ, test scores, SAT, etc.).

I wanted to help other people feel the satisfaction that I felt when after considerable thought and sweat, I finally "saw the light," and I can see some "lights" in the pupils: but time is very limited.

Teaching for me was selected because I personally am interested in improving myself and mankind. I'm in search of the why and how of man and mankind. The Mastery Learning Program is simply an area in which I can develop and learn about myself and maybe gain some insight into human nature and gain some knowledge about our purpose for being here (Earth).

The Mastery Learning program has been the first opportunity for me to give individual pupil instruction since I entered teaching to a set number of pupils on a regular basis. It is the closest I have been to what I perceive to be an ideal teaching situation.

The MLTA program has helped me to aid students who are having difficulty with certain areas in mathematics. I can deal more effectively (one-on-one) with individual problems of students.

When I began teaching, my prime goal was to make every student an "A" pupil. Needless to say, I was unsuccessful and frustrated. However, this project has aided me in realizing that, with some individual attention, most pupils are able to improve their basic math skills. All pupils will not be "A" pupils, but improvement can be made.

My goal was and is to have fewer adults and students say, "I can't do math." Students of all ages and adults seem to think by saying this they can become excused from doing any math or serious thinking. I know Mastery Learning has helped some MLTA students so they won't have to use this excuse.

Guidance

Being a member of the Mastery Team program has helped me to have a better insight regarding the attitudes, self concept of the students that I work with. I feel it has been very rewarding and I can see the need of continuing this program in order to help the students.

Mastery Learning Team Approach Program has helped me move toward my personal goals as a professional service person, because students have been reached in amazingly rewarding ways which have led to personal growth for them.

This project is very satisfying to me as a counselor and fulfills my original goals as a teacher in that I feel I offer to students personal help and a chance for them to master certain subject difficulties they are encountering. I feel that it is a very worthwhile project.

As a matter of self-fulfillment in my career, the MLTA program gives me the opportunity to assist pupils almost individually, and I feel that much more can be gained, educationally, by the pupils in this manner. There is a greater need for small group interaction. Both teachers and students are able to see growth. Growth is stimulating and motivating.

My goals as a teacher were to help students like school and feel successful in school. By participating in the program, I think that the time spent with students has made me feel closer to my goals--as opposed to regular classroom teaching.

ATTACHMENT C-9

MASTERY LEARNING: TEAM APPROACH

RESPONSES TO END-OF-SEMESTER STAFF SURVEY: 1978-1979

ITEM	LANGUAGE		MATHEMATICS		GUIDANCE		TOTAL	
	N*	M**	N*	M**	N*	M**	N*	M**
1. To what extent has project participation had a favorable impact on students'-- (1=very little; 3=some; 5=great)**								
a. specific skills achievement?	9	3.4	12	3.8	8	3.8	29	3.7
b. motivation, attitude toward school work?	9	3.2	12	3.4	9	3.9	30	3.5
2. To what extent was the time spent with students during unassigned periods of appropriate-- (1=not enough; 3=just right; 5=too much)								
a. length/duration?	8	2.1	12	2.6	9	1.9	29	2.2
b. level of productivity?	8	2.0	12	3.0	9	2.3	29	2.5
3. Of what use has each section of the MLTA Procedural Manual been to you? (1=little; 3=some; 5=great)								
a. General (Chapters I, II, III)	10	3.5	10	2.7	6	3.8	26	3.3
b. English (Chapter IV-A)	10	3.8	1	2.0	2	1.0	13	3.2
c. Mathematics (Chapter IV-B)	4	2.5	12	3.5	2	1.0	18	3.0
d. Guidance (Chapter IV-C)	5	2.8	2	3.0	9	3.8	16	3.4
4. To what degree has each of the following instructional items been useful to your students? (1=of little use; 3=useful; 5=very useful)								
a. Target Mechanics:								
(1) Worksheets	9	4.6	1	5.0	4	2.3	14	3.9
(2) Cassettes	9	4.6	0	---	4	2.3	13	3.8
b. Target Usage:								
(1) Worksheets	8	4.3	1	3.0	3	1.7	12	3.5
(2) Cassettes	8	4.3	0	---	3	1.7	11	3.5
c. Project Utilize								
(1) Worksheets	3	4.3	12	4.1	4	2.8	19	3.8
(2) Guide--Games, Activities, etc.	2	3.0	11	2.5	4	3.3	17	2.8
d. Classmate 88 Calculators	0	---	12	3.9	3	1.7	15	3.5
e. Hand-held Calculators	0	---	11	2.6	3	1.7	14	2.4
f. Tape Recorders	9	4.6	2	1.5	5	3.2	16	3.8
g. Films/Filmstrips	1	4.0	0	---	3	3.3	4	3.5
h. Other: _____	0	---	1	5.0	3	4.0	4	4.3

*N - number responding to item (excluding N/A's and OMIT's)

**M = mean rating for N responding (on a scale of 1-5)

ATTACHMENT C-10

MASTERY LEARNING: TEAM APPROACH

OSMCR FACT SHEETS: DESEGREGATION

A Fact Sheet From
 office on school monitoring & community relations

1343 Terminal Tower • Cleveland, Ohio 44113 • Phone: (216) 522-7300

DESEGREGATION IMPLEMENTATION SCHEDULE

Fall, 1979

Kennedy-Marshall Cluster
 (except junior high schools)
 Collinwood Cluster
 Junior High Schools in East Tech-
 South Cluster

February, 1980

Junior high schools in all clusters
 (except East Tech-South where
 junior highs desegregated in
 Fall, 1979)

Fall, 1980

Lincoln West-Glenville Cluster
 John Hay-West Tech Cluster
 East Cluster
 Rhodes-Adams Cluster
 East Tech-South Cluster

"... To observe, assess, and report on the progress of the desegregation of the Cleveland Public Schools and to foster public awareness and understanding of the desegregation process."

Order of U.S. District Court May 4, 1978

ATTACHMENT C-10 (continued)

A Fact Sheet From

office on school monitoring & community relations

1343 Terminal Tower • Cleveland, Ohio 44113 • Phone: (216) 522-7300

KEY DATES

THE CLEVELAND SCHOOL DESEGREGATION CASE

December, 1973	<u>Reed v. Rhodes</u> filed in U.S. District Court, Cleveland.
November 21, 1975	<u>Reed v. Rhodes</u> trial begins before Chief Judge Frank J. Battisti.
March 19, 1976	<u>Reed v. Rhodes</u> trial concludes.
August 31, 1976	Liability Opinion is issued.
February 6, 1978	The Remand Opinion and Remedial Order are issued.
May 4, 1978	The Office on School Monitoring and Community Relations is established by U.S. District Court.
June 16, 1978	The Remedial Order is modified. Two clusters are adjusted.
January 8, 1979	The Sixth Circuit Court of Appeals stays implementation of the Remedial Order until the Supreme Court rules on the Dayton and Columbus appeals.
July 13, 1979	Judge Battisti adopts "Basic Guidelines for Planning the Implementation of the Remedial Orders"
July 23, 1979	The Cleveland Board of Education chooses one of three alternative desegregation implementation schedules set forth by the Court.
July 30, 1979	The Court accepts the Cleveland Board of Education's chosen desegregation schedule. Desegregation to be completed in three phases starting in Fall, 1979.
August 23, 1979	The Sixth Circuit Court of Appeals lifts its stay of implementation of the Remedial Order. It remands the finding of liability against the State Board of Education to Chief Judge Frank J. Battisti.
September 4, 1979	The Cleveland Board of Education asserts it is ready for desegregation implementation, starting September 10, 1979.
September 10, 1979	Phase I desegregation starts; 33 schools in 3 clusters are desegregated. No serious incidents are reported.

"... To observe, assess, and report on the progress of the desegregation of the Cleveland Public Schools and to foster public awareness and understanding of the desegregation process."

Order of U.S. District Court May 4, 1978

ATTACHMENT C-10 (continued)

A Fact Sheet From
 office on school monitoring & community relations
 1343 Terminal Tower • Cleveland, Ohio 44113 • Phone: (216) 522-7300

The Remedial Order of February 6, 1978
 (The Cleveland School Desegregation Plan)

The Remedial Order was issued by the U.S. District Court in Cleveland on February 6, 1978. It is the blueprint for desegregation of the Cleveland School District.

The Remedial Order has a number of major components:

- Student Assignments
- Safety & Security Guidelines
- Educational Programs
- Role of the State of Ohio in Implementation
- Reading Programs
- Testing & Tracking
- Counseling & Career Guidance
- Magnet Schools & Programs
- Cooperation with Universities, Businesses & Cultural Institutions
- Extracurricular Activities
- Staff Development & Training in Human Relations
- Student Rights
- School - Community Relations

The Remedial Order specifies that students are to be desegregated by cluster. The Cleveland School District is divided into seven clusters:

- Kennedy-Marshall
- Collinwood
- East Tech-South
- Lincoln West-Glenville
- John Hay-West Tech
- East
- Rhodes-Adams

Exceptions to the Remedial Order:

Kindergarten and pre-kindergarten students are not affected by the Remedial Order. High school seniors have the option of graduating from their current schools or being reassigned under the Remedial Order.

"... To observe, assess, and report on the progress of the desegregation of the Cleveland Public Schools and to foster public awareness and understanding of the desegregation process."
 Order of U.S. District Court May 4, 1978

ATTACHMENT D

MASTERY LEARNING: TEAM APPROACH

DYNAMICS OF TEAM FUNCTIONING: 1977-1978

After each (team inservice/planning) session, the leaders submitted to the manager (for the evaluator) a "Team Meeting Report," accompanied by the Postmeeting Reaction Form completed by each team member. (This Form, like the Group Climate Inventory completed at the first project-wide inservice meeting and the Group-growth Evaluation Form at the last, were adapted from: J.W. Pfeiffer and J. Jones, A Handbook of Structured Experiences for Human Relations Training, Volume III, La Jolla, California, University Associates, 1974.) These post-meeting self-report instruments provided on a continuous basis the proposed monitoring of team dynamics, which supplemented the manager's on-site observations of teams at work.

Team meetings at project schools began the week of October 10, 1977--a week later than originally proposed. From that time through April 14, 1978, when student-sessions were concluded, teams could have had 24 weekly meetings. Project-wide, 100 meetings were reported: some teams chose not to meet during the week of a project-wide inservice session; some, as the year went on, decided that meeting every-other-week was sufficient; several team meetings were cancelled because of inclement weather and other interruptions of schooling, as well as resignations of a few team members. Two teams held two or three meetings after April 14 to continue/complete project business for the year. The project manager visited 47 team meetings, an average of 7.8 per project school. Her observations confirmed the teams' reports that decision-making and planning for promoting student achievement were carried on cooperatively, with all members participating.

Information on the dynamics of team functioning have been presented on the following pages. These data, supplementing the manager's informal appraisal of teams' operations, provided several indicators of the "group climate" and "task orientation" of project teams. All teams, reporting on their weekly meetings, ranked first or second (of ten) that "there was much warmth and friendliness" and first-through-fourth that their teams were "strictly task-oriented" and "worked on...issues." Ranked eighth-through-tenth by all teams was the description that "people were uninterested and uninvolved."

Because of changes in team membership in four of the six schools and interruptions of schooling for various reasons throughout the year, it was not possible accurately to assess the predictive value of the Group Climate Inventory administered in early October. Of the two teams scoring highest at the beginning, one kept its four members throughout the year and was one of the two most "productive." The other, however, went from three to two members on February 1 and to only one member (the counselor) by May 1, and--along with the team scoring lowest on the initial inventory -- ended the year in the least "productive" pair of teams. (Productive, as used here, includes both "good" group climate and high task-orientation.)

The Group-growth Evaluation completed at the May 3 inservice meeting provided information on only the four teams still basically intact. The team scoring lowest on the initial Inventory, not suprisingly, reported the greatest "growth" in all but one item--namely, "I am oriented toward personal goals rather than toward group objectives." Conversely, the team completing the Evaluation in May having the highest initial

DYNAMICS OF TEAM FUNCTIONING DATA*

SCHOOL	GROUP CLIMATE INVENTORY SCORE 10/4/77	N	GROUP-GROWTH EVALUATION MEAN SCORES: 5/3/78 ("Initially"/ "Now," above; change, below; highest possible score = 7)					
			CLIMATE (9 ITEMS)	DATA FLOW (2 ITEMS)	GOAL FORMATION** (4 POS. ITEMS) (1 NEG. ITEM)		CONTROL** (1 POS. ITEM) (2 NEG. ITEMS)	
A. B. HART	55.0	3	5.5 - 6.5 +1.0	5.0 - 6.2 +1.2	4.8 - 5.9 +1.1	4.3 - 3.0 -1.3	6.3 - 7.0 + .7	1.3 - 1.0 -.3
AUDUBON	47.5	3	3.5 - 4.9 +1.4	3.7 - 5.0 +1.3	3.0 - 4.3 +1.3	4.3 - 4.7 + .4	2.0 - 4.3 +2.3	3.2 - 2.7 -.5
C. F. SHULER	58.5		(Data were not available from all team members.)					
J. M. GALLAGHER	52.3							
LINCOLN	55.0	2	4.4 - 4.9 + .5	4.0 - 4.8 + .8	4.6 - 5.4 + .8	5.0 - 4.0 -1.0	4.5 - 4.0 - .5	2.3 - 2.0 - .3
R. H. JANISON	57.5	4	5.9 - 6.1 + .2	6.0 - 6.0 ---	5.0 - 5.4 + .4	5.0 - 4.0 -1.0	5.8 - 7.0 + .2	1.8 - 1.8 ---

(Continued on following page)

* Data were collected through the Group Climate Inventory, Postmeeting Reaction Form and Group-growth Evaluation Form, adapted from: J.W. Pfeiffer and J. Jones, A Handbook of Structured Experiences for Human Relations Training, Volume III, La Jolla, California, University Associates, 1974, pp. 25-27, 30.

** POS. = positive = statements reflecting "good" team functioning; NEG. = negative = statements of feelings that could interfere with team functioning.

Highest possible score was 80,

RANGE AND MEDIAN OF AVERAGE RANKINGS* OF
"WHAT TEAM MEETING WAS LIKE"

(continued from preceding page)

SCHOOL	No. of Meetings Reporting On	ITEM 1 Much warmth and friendliness	ITEM 2 much aggressive behavior	ITEM 3 people uninterested, uninvolved	ITEM 4 people tried to dominate, takeover	ITEM 5 group needed help	ITEM 6 much irrelevant conversation	ITEM 7 strictly task-oriented	ITEM 8 members very polite	ITEM 9 much underlying irritation	ITEM 10 worked on our process goals
A. B. HART	17	1.0-3.3 2.7	7.0-9.3 8.7	5.5-10.0 8.0	6.0-9.3 7.3	3.3-8.3 6.0	4.0-7.7 6.3	1.0-6.3 3.0	1.0-4.0 3.3	1.0-9.3 7.7	1.7-5.3 2.3
AUDUBON	18	1.0-6.0 2.2	6.0-9.8 8.0	5.7-8.8 7.6	4.7-8.7 8.0	3.0-8.5 5.1	5.0-8.0 6.4	2.5-5.3 3.3	1.7-3.5 2.6	3.3-8.8 7.4	2.7-6.3 4.0
C. F. SHULER	17	1.0-5.5 2.5	5.0-9.0 7.3	5.0-9.0 7.3	5.0-8.3 7.0	4.0-9.5 7.3	4.3-9.5 7.0	1.3-6.5 2.3	3.0-5.5 3.7	4.5-9.0 7.0	1.3-5.0 3.0
J. M. GALLAGHER	13	1.0-4.7 2.5	4.8-8.8 6.5	4.5-10.0 8.5	5.0-8.8 7.8	1.0-9.5 6.7	4.0-9.0 8.0	1.0-6.0 3.3	1.5-4.4 3.2	4.2-9.5 7.5	1.0-4.5 2.5
LINCOLN	12	1.0-6.5 1.6	4.7-8.8 6.8	6.3-9.5 8.3	6.0-8.5 7.4	3.5-10.0 6.1	7.7-10.0 8.4	1.0-4.3 2.3	2.5-5.3 3.6	4.0-10.0 6.8	1.0-3.5 2.4
R. H. JAMISON	23	1.0-3.3 2.3	6.3-8.5 7.0	6.0-9.8 8.0	5.7-8.5 7.3	5.7-8.3 7.3	5.5-8.7 6.3	1.7-4.5 2.8	2.3-4.3 3.3	5.8-10.0 8.5	1.5-4.8 2.3

* Rankings were from 1 ("most like us") through 10 ("least like us").

Inventory score reported the least growth. All four teams indicated growth in all areas, with one exception in addition to that mentioned above: a team with an "average" score on the initial Inventory and a high mean-ranking on weekly reports of task-orientation (until the spring vacation, when one team member resigned) indicated in May "negative growth" in relation to the group's "sense of responsibility for getting a job done" (an item included under Control).

These three self-report instruments seemed to provide an interesting systematic supplement to the manager's observations of project teams "in action," in assessing attainment of the fourth facilitating objective for 1977-1978.

ATTACHMENT E

MASTERY LEARNING: TEAM APPROACH--1977-1980

FOLLOW-UP SURVEY
JUNE, 1980

Instructions

- All staff currently or previously involved with the MLTA project are asked to complete this follow-up survey within the next sixty (60) hours.
- Fold it "inside out"--with this third folded in and the bottom third of this page folded out, so the return address is visible.
- Staple.
- Mail no later than Thursday, June 26, 1980.

Thank
you.

SCHOOL
MAIL

TO: Dr. Reba Garvey
Research and Development
Room 600-S, HEADQUARTERS
Cleveland Public Schools
1380 East Sixth Street
Cleveland, Ohio 44114

Where comments or explanations are asked, please print or write very legibly, using only the space provided. All other responses should be indicated by marking X in the appropriate box for each item. Use a ball-point or "Fletch" pen, or a sharp, dark pencil.

1. Please mark X in the appropriate boxes to indicate--in the top row--each semester during which you had contact with the MLTA project and--below--your "capacity" during each of those semesters.

	<u>1977-1978</u>			<u>1978-1979</u>			<u>1979-1980</u>	
	1st	2nd		1st	2nd		1st	2nd
• SEMESTER OF CONTACT	☐	☐	...	☐	☐	...	☐	☐
• CAPACITY EACH SEMESTER:								
	1st	2nd		1st	2nd		1st	2nd
• Supervisor	☐	☐	...	☐	☐	...	☐	☐
• Building Administrator .	☐	☐	...	☐	☐	...	☐	☐
• Counselor	☐	☐	...	☐	☐	...	☐	☐
• English Teacher	☐	☐	...	☐	☐	...	☐	☐
• Mathematics Teacher	☐	☐	...	☐	☐	...	☐	☐
• Other	☐	☐	...	☐	☐	...	☐	☐

Respondents' markings of the above items have been summarized graphically on the following page. All "types" of persons involved in all three years of the project were among those completing the follow-up survey. Of 77 potential respondents (listed in Attachment C-3), 42 (54.5%) submitted completed surveys, as shown below.

CATEGORY	POTENTIAL RESPONDENTS	ACTUAL RESPONDENTS	
		N	%
(Subject) Supervisors	3	3	100.0
(Building) Administrators	17	3	17.6
English Teachers	19	7	36.8
Mathematics Teachers	19	13	68.4
Counselors	19	16	84.2

MLTA FOLLOW-UP SURVEY*

RESPONDENTS' EXTENT OF PROJECT CONTACT

CATEGORY	SEMESTERS OF MLTA CONTACT					
	1977 - 1978		1978 - 1979		1979 - 1980	
	SEM. 1	SEM. 2	SEM. 1	SEM. 2	SEM. 1	SEM. 2
SUPERVISORS	=====	=====	=====	=====	=====	=====
ADMINISTRATORS	=====	=====	=====	=====	=====	=====
ENGLISH TEACHERS	=====	=====	=====	=====	=====	=====
MATHEMATICS TEACHERS	=====	=====	=====	=====	=====	=====
COUNSELORS	=====	=====	=====	=====	=====	=====

*Each line segment above corresponds to one semester of MLTA involvement.

2. Please mark X in the appropriate box to indicate the extent of your familiarity with the (Bloom/Carroll) mastery learning approach prior to contact with the MLTA project.

☐ never heard of it
 ☐ had heard some mention of it
 ☐ had read/heard about it--professional journal, book, lecture, etc.
 ☐ had used similar strategies

NUMBER MARKING EACH RESPONSE

	Never Heard	Some Mention	Read/Heard	Had Used	Total
Supervisors	0	0	2	1	3
Administrators	0	1	2	0	3
English Teachers	4	1	1	1	7
Mathematics Teachers	8	5	0	0	13
Counselors	4	10	2	0	16

3. From your perspective, rank each of the following in order of importance to successful implementation of a mastery-learning project such as MLTA. Mark the numeral 1 in the box to the left of the most important; 2, the second-most important; etc. Please do not use any numeral more than once!

- ☐ incorporation of the supplementary-guidance component
☐ nature of the content--language/mathematics skills
☐ selection/participation of "average" students
☐ supplementary instructional materials available through project
☐ team approach among staff (teacher-teacher-counselor)
☐ other (Specify. _____)

Averages of rankings submitted are shown in semi-graphic form on the following page. This arrangement is designed to facilitate a variety of comparisons: e.g., the three administrators agreed that the team approach was most important; all but the counselors concurred that the guidance component was the least important of the five listed.

ATTCHMENT E

MASTERY LEARNING: TEAM APPROACH--1977-1980

MEAN IMPORTANCE RANKING OF FIVE MLTA COMPONENTS: JUNE, 1980 FOLLOW-UP SURVEY*

SUPERVISORS (N = 3)	ADMINISTRATORS (N = 3)	ENGL. TEACHERS (N = 7)	MATH. TEACHERS (N = 13)	COUNSELORS (N = 16)
	1.00-Team Approach			
		1.67-Skills Content		
			1.85-"Average" Students	
			2.08-Supplem. Materials	
				2.40-Team Approach
				2.60-"Average" Students
2.67-Team Approach	2.67-Skills Content			
2.67-Supplem. Materials			2.77-Skills Content	
3.00-"Average" Students		3.00-"Average" Students		2.87-Supplem. Guidance
3.00-Skills Content		3.17-Team Approach		
	3.33 Supplem. Materials		3.38-Team Approach	3.36-Skills Content
		3.50 Supplem. Materials		
				3.64-Supplem. Materials
	4.00-"Average" Students			
	4.00-Supplem. Guidance	4.20-Supplem. Guidance		
			4.46-Supplem. Guidance	
5.00-Supplem. Guidance				

*Means reported above were calculated from responses to Item 3 on the Survey.

4. Please mark X in one box for each item to indicate the extent to which you feel that the typical participating student showed improvement in:

regular English/mathematics classwork . ☐ NONE ☐ LITTLE ☐ SOME ☐ GREAT ☐ ???

NUMBER MARKING EACH RESPONSE

	NONE	LITTLE	SOME	GREAT	???
Supervisors	0	0	0	1	1
Administrators	0	0	3	0	0
English Teachers	0	1	5	1	0
Mathematics Teachers	0	0	8	4	1
Counselors	0	0	11	2	0
TOTAL	0	1	27	8	2
%	0.0%	2.6%	71.1%	21.1%	5.2%

attitude toward school/school work . . ☐ NONE ☐ LITTLE ☐ SOME ☐ GREAT ☐ ???

NUMBER MARKING EACH RESPONSE

	NONE	LITTLE	SOME	GREAT	???
Supervisors	0	0	0	0	2
Administrators	0	0	1	2	0
English Teachers	0	0	3	1	1
Mathematics Teachers	0	1	7	5	0
Counselors	0	0	10	6	0
TOTAL	0	1	21	14	3
%	0.0%	2.6%	53.9%	35.9%	7.6%

The proportion of English/mathematics teachers and counselors marking "some" or "great" improvement in attitude were similar. Mathematics teachers, more than English teachers or counselors, indicated that participating students showed "great" improvement in regular classwork.

Comments:

- . The students participating in MLTA seemingly have developed a more positive outlook on education and learning.
- . Students were excited about being able to master certain basic skills.
- . Students' attitudes toward school/school work were more apparent than improvement in classwork, because of shifting of classes and schedule changes.
- . Students in project appeared motivated and alert when working with the special materials.
- The students were very enthusiastic in the guidance component.
- . During the time I was involved as a teacher, we were working the "bugs" out of the program. If I had continued, I expect the results would have been much better.
- . The change of students at the semester, I think, hampered seeing great improvement.
- . A very unstable year for the school system no doubt damaged improvement.
- . Time not sufficient.

5. Notice that there are three "versions" of this item. At least one--possibly more than one, depending upon your assignments since September, 1977--applies to each person receiving this survey. Please respond to the appropriate section(s) according to the instructions below and/or on following page.

CURRENT MLTA MEMBER: Mark X in the appropriate box to indicate the extent to which you:

- | | NOT AT
ALL | | RARELY | | SOME-
TIMES | | VERY
OFTEN |
|---|--------------------------|----|--------------------------|----|--------------------------|----|--------------------------|
| . expect to be involved in team approaches after this school-year. | ☐ | .. | ☐ | .. | ☐ | .. | ☐ |
| . have been applying MLTA strategies in non-project situations with individuals/small groups. | ☐ | .. | ☐ | .. | ☐ | .. | ☐ |
| . are using mastery-learning approaches in regular classroom situations. | ☐ | .. | ☐ | .. | ☐ | .. | ☐ |

Comments: _____

FORMER TEAM MEMBER: Mark X in the appropriate box to indicate the extent to which--since participating in the project--you have:

- | | NOT AT
ALL | RARELY | SOME-
TIMES | VERY
OFTEN |
|--|--------------------------|--------------------------|--------------------------|--------------------------|
| . been a member of a group of professionals working as a team, with students. | ☐ | ☐ | ☐ | ☐ |
| . utilized mastery-learning strategies with individual students and/or small groups. | ☐ | ☐ | ☐ | ☐ |
| . applied MLTA approaches to promote mastery learning in regular classroom situations. ... | ☐ | ☐ | ☐ | ☐ |

Comments: _____

Only the tense was different in items for current and former team members. Therefore, items have been combined so that responses could be compiled for all English teacher, mathematics-teacher, counselor respondents together.

NUMBER MARKING EACH RESPONSE

CURRENT/FORMER COMBINED ITEM		NOT AT ALL	RARELY	SOME- TIMES	VERY OFTEN
have been/expect to be involved in non-project professional <u>team approaches</u> for working with students	E*	5	0	0	2
	M	3	1	6	1
	C	2	2	3	6
applying mastery-learning strategies in non-project situations with <u>individual students/small groups</u>	E	2	1	4	0
	M	0	1	9	2
	C	1	0	5	10
applying MLTA approaches to promote mastery learning in <u>regular classroom</u> situations	E	2	2	2	1
	M	0	2	8	2
	C	2	1	5	3

*E = English teachers; M = mathematics teachers; C = counselors.

Comments:

- . If used in classroom just sometimes, it helps 25% of the time.
- . The improvement of the students in the subject area is at least 25% or more.

Comments:

- . Some of MLTA materials are similar to PADS program.
- . It works!
- . I find that it is necessary to prepare not only the student but also the teachers; otherwise it doesn't work.
- . Can use the materials with special pupils needing guidance assistance.
- . The mastery learning materials were oftentimes used with other groups in the counseling or guidance classes.
- . Even if MLTA funding ends, the materials, practices and procedures may be used with regular classes.
- . With the school having set up the mastery classes in our building, I was able to gear my teaching toward such an approach more than in a normal situation.
- . Although I do not expect to be involved in team approaches this next school year, I feel this teaching method is most worthwhile and should be expanded to all areas.
- . Mastery learning strategies should be utilized in other subject areas and it should continue as part of a school wide effort especially under the desegregation programs.

ADMINISTRATOR, SUPERVISOR, OTHER:

On the basis of your experience with MLTA, mark x in one box to the right of each statement to indicate the extent to which you agree with it.

- | | DISAGREE | TEND TO DISAGREE | NEUTRAL;
DON'T KNOW | TEND TO AGREE | STRONGLY AGREE |
|--|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| . Participation in MLTA has been beneficial to teachers/counselors involved. | ☐ | ☐ | ☐ | ☐ | ☐ |
| . The teacher-counselor team approach is likely to continue after MLTA funding ends. | ☐ | ☐ | ☐ | ☐ | ☐ |
| . Team members will continue to use mastery-learning strategies in the future. | ☐ | ☐ | ☐ | ☐ | ☐ |
| . Involvement with the MLTA project has had desirable school-wide effects. | ☐ | ☐ | ☐ | ☐ | ☐ |
| . English and mathematics teachers should increasingly implement mastery strategies. | ☐ | ☐ | ☐ | ☐ | ☐ |
| . Mastery learning strategies can be utilized in any "school subject." | ☐ | ☐ | ☐ | ☐ | ☐ |

Comments: _____

Supervisors and principals (administrators) were presented a different set of items in #5, as shown at the bottom of the preceding page. Their responses have been presented in the chart below.

NUMBER MARKING EACH RESPONSE

SUPERVISOR/ADMINISTRATOR	ITEM	NEUTRAL	TEND TO AGREE	STRONGLY AGREE
MLTA participation beneficial to staff team-members	S*	0	0	3
	A	0	1	2
team approach likely to continue after August, 1980	S	2	1	0
	A	1	2	0
team members likely to continue to use mastery-learning strategies.	S	0	2	1
	A	1	1	1
MLTA involvement-desirable school-wide effects	S	1	2	0
	A	1	2	0
English/Math. teachers should use mastery learning strategies more.	S	2	1	0
	A	1	2	0
Mastery Learning strategies can be used in any subject.	S	0	3	0
	A	0	2	1

*S = Supervisor; A = Administrator.

Comments:

- . The team concept can inspire the many students who need just a little individual assistance to improve their important skills and motivations.
 - . It's a good program-but teachers lack the time (and energy often) to do as much as they would like to do.
6. Like any program funded under Title IV-C, MLTA is expected to product tested and improved educational practices which are "transportable" to other schools and school systems. The theoretical focus of MLTA is the management of instructional materials/settings to capitalize upon varied learning rates and styles. The goal is effecting higher levels of achievement for all students.

During the past three years of unpredictable and unprecedented occurrences, every person associated with MLTA has learned a great deal about implementing mastery learning strategies to reach this goal. Now, as a "veteran," please share below--specifically and concisely--your best advice to a "mastery learning rookie."

Responses:

- A first year member of MLTA project should take full advantage of the orientation sessions and all subsequent workshops, seminars and conferences. The MLTA concept should be internalized to such an extent that the students will become excited about all facets of the program. Build and maintain the high interest level of all students. (A*)
- Plan ahead. Take a few hours at the beginning of the term to organize materials and equipment. Using file folders, prepare student files with progress charts; run off sufficient quantities of answer/work sheets to last a while; check out equipment and set up; then stick to a routine for conducting ML sessions. It'll save a lot of hassle later. Also remember to heap piles of praise on students for their littlest achievement. Kids love and need to be stroked. (E)
- Use the materials as often as you can. It takes use of materials to sift out which ones work best for you. (C)
- The best way to get results from this approach is to set up a workable routine with the students and stick to it. It is also important to keep in contact with the students, even and especially when they are not doing MLTA. You need to be supportive and make them feel special so you can build their self-confidence, knowledge and self concept. (E)
- Read the Guide. Attend meetings. Do not get behind in tests. Work in small groups. (M)
- Read instructions thoroughly and go over equipment, running the tests through for yourself; take one or two to see how a student would feel with tape, earphones, machine and solitude, and self-correcting tests. Anticipate reaction and problems that might arise. Be at ease with material when you begin. It save you trouble! Be joyful in introducing materials to new students. This is good stuff! Students all like it. All students of mine who used it profited and learned because of their own clear knowledge that they had improved. Excellent program. (E)
- Carefully select pupils. (M)
- Choosing students was the most difficult, but by picking the student that had study-hall when I had an assigned period seemed to work out the best.... (M)

*(S) = supervisor; (A) = administrator; (E) = English teacher;
(M) = mathematics teacher; (C) = counselor.

Responses: (Continued)

- . Find out your pupils need [s]; use the plan as developed; it will work. (S)
- . Choose students of average ability - otherwise can be frustrating. Choose willing-to-learn students at first. Find ways of motivation: calculator was great as a motivator. (M)
- . Use the ideas in the book; use the materials provided, particularly the Monroe Classmate 88. Don't take very much time diagnosing problems. Get them busy right away. There will be time later to sneak in more testing. The math. worksheets are of questionable value. Groups of three or four seemed to work best. The hard part is keeping down to this number, once they start[ed], students want to come almost every day for more work. (M)
- . Work in groups of no more than four. To a degree, leave them alone to operate the "hardware." As soon as possible, try to use MLTA techniques in your regular classes. (M)
- . Start out with only a few students and, as both teacher and students become familiar with the mechanics of the program, more students can be added. (E)
- . Start with a small group; get organized (Oh, that paper work!); then increase number of pupil participants. (M)
- . Work with very small groups - max. five. Select students carefully. Set a definite time and try to get this time worked into the master schedule of classes. (M)
- . Take advantage of the equipment and the very small group situation. You can tutor some while others are working with the computer or calculators. Students can tutor each other. They often teach better than we do. (M)
- . Mastery Learning in a small group setting outside the classroom does work. Try to involve all students in the group and keep them current with classroom lessons. Use the whole team to keep students involved and interested. (M)
- . Planning and the part of the teacher or counselor is extremely important in conducting a successful program. When group sessions are planned carefully, students benefit more and get more of a feeling of accomplishment. Students lose interest quickly in unplanned sessions. (C)

Responses: (continued)

- . Know exactly what you are trying to accomplish. Select students carefully, based on interest in--as well as need for--additional help. "Plan your work. Work your plan." (E)
- . Sessions with students should be as flexible as you, the instructor, can feel comfortable in having. (E)
- . My main concern pertaining to the program is scheduling of sessions so as to be beneficial to all students involved. (C)
- . Read all guidelines and directions closely and carefully. Refer to manager or whoever is in charge for guidance. Plan and implement your program of MLTA only after you are assured that the English and mathematics teachers are dedicated to the program--also that the administrator is willing to coordinate the total program. (C)
- . I would say that inservice training for all teachers in the math. and English disciplines needs to be a priority. Unfortunately, teachers or guidance personnel will stand back and admire but not participate in the process. "Experts" may help facilitate participation. Both teachers and students will benefit. (P.S. I really enjoyed the short time I participated. Thank you for helping me.) (C)
- . For the mastery learning program to succeed there must be a strong team approach, and each team member has to do his part. This enthusiasm will generate to the students. (C)
- . The key to a successful MLTA experience is commitment by the counselor/teacher. Don't count on the school, or your supervisor, giving you the time necessary to do the job. Given the above, it is most important that student meetings be planned and implemented on time. Consistency is of prime importance to the student. (C)
- . I got out of program. This has to be built into the master schedule... Fund, and give supplies. (E)
- . As counselor and starting the use of ML in its last year, my reactions are limited. Therefore, the results are based upon the problem faced in this last year - desegregation. Phase II took the pupils we were working with. It also lowered our motivation and blighted our efforts. The group of pupils received on 3/17/80 were difficult to approach - Why? The Star Project (Title I) was engulfing. ML did not have a chance. Star Project was the mandatory force to be dealt with. (C)

Responses: (continued)

- My first year with the MLTA has been one of interruption (the school strike, and many and varied schedule changes). The idea of students coming for group work on the recreational period--one of twenty minutes daily--worked well with me for group size and participation. I am looking forward to a "normal" year. (C)
- Pray that school year is normal! Unfortunately, this school year was a frustrating one. However, I did enjoy the few sessions we held. (C)
- Keep trying. It's the best teaching-learning experience going. Keep working at it: it will drive you crazy but you do see some "lights" come on. (E)
- In times of low teacher moral in the system, MLTA is the best program for teacher involvement. Students' desire to achieve is very high in this program. (M)
- I feel that one may continue to expand their learning horizons by constant effort as a veteran or rookie to gain insights into greater achievement for students. (C)
- The MLTA team project experience is highly rewarding. Professionally it brings an entirely new approach to secondary school faculties who rarely share classroom assignments. Educationally it coordinates the teaching activities to increase the impact for learning for all students involved. For the counselor, it is highly rewarding because the small-group contact allows for more direct involvements over a longer period of time to the increased, in-depth exploratories [sic] which have proven lasting effects. (C)

ATTACHMENT F
 MASTERY LEARNING: TEAM APPROACH

NON-PROJECT INSERVICE WORKSHOP MATERIALS*

	Page
PRE-POST TEST	88
TRANSPARENCIES:	
Major Characteristics of a Curriculum Which Would Facilitate Learning for Mastery	93
Steps in Planning for Mastery**	94
Steps in Teaching to Mastery**	96
MASTERY LEARNING -- WHAT IS IT?	97
REFERENCE LIST.	102

*These materials were prepared/compiled by the project manager, who was invited to make a presentation at two Cleveland Public Schools citywide meetings:

- Ability Grouping Committee (for administrators, supervisors) - April 11, 1980;
- Basic English Skills Project (for secondary teachers) - May 14, 1980.

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Ability Grouping Committee

Work Session

Mastery Learning

DIRECTIONS: Please answer the following multiple choice questions. Mark your answers directly on the test.

When you have completed the test, record your answers again on the sheet at the end of the test. Do not write your name on the test. Thank you!

April 11, 1980

IN ITEMS 1-3 SELECT THE BEST DESCRIPTOR OF EACH OF THE FOLLOWING TERMS--

1) MASTERY LEARNING IS AN EDUCATIONAL STRATEGY WHICH:

- a) is designed to assist poor learners.
- b) is designed to remediate slow learners.
- c) is designed to make students more similar in respect to successful skill achievement.
- d) features a test-teach-test cycle.

2) COMPETENCY BASED EDUCATION IS:

- a) an educational program which features a "back to basics" approach.
- b) an educational system which features minimum competency testing.
- c) a school curriculum based on texts and assignments.
- d) a school program based on goals and continual assessment.

3) MINIMUM COMPETENCY TESTING IS:

- a) a measurement of a competency based educational program.
- b) a method of correcting student skill deficiencies.
- c) a requirement for promotion and graduation in over thirty states.
- d) a vague and meaningless term in and of itself.

4) OF THE FOLLOWING, WHICH IS THE MOST ESSENTIAL VARIABLE OF MASTERY LEARNING?

- a) time on task
- b) instructional supplies
- c) peer tutoring
- d) classroom environment
- e) all of the above

5) OF THE FOLLOWING, WHICH IS LEAST ESSENTIAL TO IMPLEMENTATION OF MASTERY LEARNING?

- a) formative measurement
- b) ability grouping
- c) specific unit objectives
- d) alternate teaching techniques
- e) summative testing

6) READ THE FOUR STATEMENTS BELOW:

- A) All students can learn.
- B) There are fast and slow learners.
- C) There are good and poor learners.
- D) Students can become more similar in learning rate.

WHICH COMBINATION OF THESE STATEMENTS (see below) BEST REFLECTS A MASTERY LEARNING PHILOSOPHY?

- a) AC
- b) AD
- c) BC
- d) CD

7) WHICH TESTING PRACTICE IS PARTICULARLY HELPFUL IN A HETEROGENEOUS CLASSROOM?

- a) use of a test specification chart
- b) use of formative tests
- c) frequent testing
- d) utilization of student made tests
- e) all of the above

8) DIFFICULTY IN TEACHING A HETEROGENEOUS CLASS IS FREQUENTLY ATTRIBUTED TO:

- a) class size.
- b) range of ability.
- c) diversity in learning style.
- d) administrative paranoia.
- e) all of the above.

9) A SUPERVISOR PROMOTING MASTERY LEARNING IMPLEMENTATION SHOULD ENCOURAGE TEACHERS FIRST TO:

- a) examining his/her philosophy of learning.
- b) identify suitable programmed instructional materials.
- c) locate available experts in the field.
- d) seek permission for revising the prescribed course of study.

10) ANTHONY F. GREGORC HAS IDENTIFIED FOUR LEARNING STYLE PROFILES--WHICH BEST DESCRIBES YOURS?

- a) Abstract Sequential
- b) Abstract Random
- c) Concrete Sequential
- d) Concrete Random

WHY?

ADDITIONAL ANSWER SHEET

(To be turned in at the end of the meeting)

1 - _____

6 - _____

2 - _____

7 - _____

3 - _____

8 - _____

4 - _____

9 - _____

5 - _____

10 - _____

April 11, 1980

MAJOR CHARACTERISTICS OF A CURRICULUM WHICH WOULD FACILITATE
LEARNING FOR MASTERY

- A. Explicit goals/objective stated in terms of student performance outcomes
- B. Explicit, clear consequences for performance on assessments - related to certification at end of course
- C. Entry skills and exit skills are clearly defined for courses, subjects, curriculums, etc.
- D. Sequential organization of skills - interrelatedness across levels, grades, etc.
- E. Assessments are used in both summative and formative manner
- F. Assessments are given frequently and continuously
- G. Skills are organized into manageable units
- H. Assessments take many different forms which are empirically related to the specific student performance outcomes
- I. The curriculums do not sanction or specify a particular instructional process
- J. Curriculums do reference available instructional materials, resources - more than one way to teach any skill to any kid
- K. Absolute predetermined performance standards on formative assessments stated as yes/no, mastery/non-mastery, explicit and clear procedures for course certification, degree of mastery
- L. Learning for Mastery curriculums need to change to reflect changes in student entry skills and demands for other exit skills

DENVER PUBLIC SCHOOLS
Division of Education
Mastery Learning Program
PLANNING FOR MASTERY
Overview

STEPS IN PLANNING FOR MASTERY

1. Write overall instructional objective
2. Task analyze overall instructional objective
 - a. Identify prerequisite skills (assumptions about students' prior learning, skills that students must have in order to participate effectively in the unit being planned)
 - b. Identify component skills (learning required to master the overall objective)
3. Use task analysis
 - a. Develop a procedure for assessing prerequisite skills (diagnostic procedure to determine if the necessary prior learning has occurred)
 - b. Develop mini-unit objectives (based on component skills)
 - c. Develop or select a test assessing the component skills and set an appropriate mastery standard
 - (1) administered at the end of the unit (summative evaluation of overall instruction)
 - (2) can be administered as a pretest prior to implementing the unit (determines if any component skills are already mastered, indicates where instruction should begin)
4. Plan mini-unit instruction
 - a. Develop lesson plans (following the lesson plan format) for group-based instruction for each mini-unit

STEPS IN PLANNING FOR MASTERY

- b. Develop diagnostic progress tests (formative evaluation) for each mini-unit
- c. Develop correctives for each mini-unit
- d. Develop extension activities for each mini-unit

DENVER PUBLIC SCHOOLS
Division of Education
Mastery Learning Program
TEACHING TO MASTERY
Overview

STEPS IN TEACHING TO MASTERY

1. Orient students to mastery learning
2. Teach each mini-unit to mastery
 - a. Present the objective
 - b. Present the group-based instruction
 - c. Allow adequate time for appropriate practice
3. Diagnose student learning
Administer diagnostic/progress test
4. Prescribe appropriate instruction
 - a. Extensions
 - b. Correctives
 - c. New mini-unit objective
5. Grade for mastery and report results to students/parents
 - a. Administer final (summative) exam
 - b. Assign grade for unit and report meaning of grade to students/parents
6. Evaluate program effectiveness
Evaluate student successes in terms of cognitive and affective learnings when taught through the mastery approach

MASTERY LEARNING--WHAT IS IT?

Mastery learning is an educational strategy developed by Benjamin Bloom based on the premise that virtually all students can learn virtually any subject, if they are given clear objectives, adequate learning tools, and sufficient time to assimilate the material. Although mastery learning was originally designed for the classroom, it is being used successfully in individualized and small group learning situations for skill mastery.

It is important to understand that mastery learning is not a curriculum or a set of rules on what should be taught; it is, instead, a theory on how to manage what is taught for maximum success by a large number of learners. The fact that slow learners achieve more when given an adequate amount of time and favorable learning conditions is a testament to the concept that all children are able to learn. And like a domino effect, a student, who is able to see improvement, becomes more confident, more willing to learn, and, finally, a better student.

The mastery learning model being implemented through this project is based on small group and individualized instruction. Students are given diagnostic tests to identify areas of weakness. These students work for mastery outside of the classroom with instructional materials specifically designed for the project. When both the student and teacher decide that mastery has been accomplished, the student is then post-tested on that skill. If, indeed, mastery is evident, the student moves on to another area. If not, the amount of remediation may be planned according to the level of mastery.

Various approaches to mastery learning as a classroom strategy or an individualized learning model will be addressed as part of the project inservice. It is interesting to note at this point, the reaction of Cleveland teachers and counselors who have worked with the project and with mastery learning for the first time. Their comments are printed at the end of this section, but they were summarized at one of the inservice workshops as follows: "mastery learning...is a way of resolving the Five Ifs of teaching:

1. If I had more time...
2. If I had fewer students...
3. If I had no discipline problems...
4. If I had more sophisticated instructional equipment and supplies...
5. If I had students who were more highly motivated...

...then I could do a better job of teaching.

The project attempts to create an atmosphere for maximum achievement by eliminating the "ifs".

1. Time is provided to conduct mastery learning student sessions outside of the regular classroom. The student is encouraged to work at his own rate and take whatever time is needed to master certain skills.
2. Mastery learning sessions are geared to individualized and small group instruction to improve specific language and mathematical skills.
3. The small group setting of students who really want help eliminates many of the large classroom discipline problems.
4. Special instructional equipment and supplies purchased for the project allow teachers and students the opportunity to use very sophisticated and individualized materials which are often unavailable to, or impractical in, the large classroom. This kind of material can improve the quality of instruction.
5. Guidance counselors work in small group guidance classes to help motivate students and identify individual needs which affect student attitude and performance. Each mastery learning student recognizes that both his or her counselor and teacher are willing to work for their improvement in school.

The project emphasizes the belief that, "something special happens to students because teachers and counselors are working together."

The following are responses to the question: "In what way has the MLTA Project related to, or helped fulfill, your original goals and objectives as a teacher?"

MLTA PROJECT TEACHER/COUNSELOR COMMENTS

Inservice Workshop--March 3, 1979

Guidance

Being a member of the mastery team program has helped me to have a better insight regarding the attitudes, self concept of the students that I work with. I feel it has been very rewarding and I can see the need of continuing this program in order to help the students.

Mastery Learning:Team Approach Project has helped me move toward my personal goals as a professional service person because students have been reached in amazingly rewarding ways which have led to personal growth for them.

This project is very satisfying to me as a counselor and fulfills my original goals as a teacher in that I feel I offer to students personal help and a chance for them to master certain subject difficulties they are encountering. I feel that it is a very worthwhile project.

As a matter of self-fulfillment in my career, the MLTA program gives me the opportunity to assist pupils almost individually, and I feel that much more can be gained, educationally, by the pupil in this manner. There is a greater need for small group interaction. Both teachers and students are able to see growth. Growth is stimulating and motivating.

My goals as a teacher were to help students like school and feel successful in school. By participating in the program, I think that the time spent with students has made me feel closer to my goals as opposed to regular classroom teaching.

Mathematics

My involvement in the Mastery Learning:Team Approach Project has been rewarding because I'm able to give my students the individual assistance needed for their learning process and achievement.

This has helped students to work to their potential and to realize there might actually be someone who cares about them, not their numbers (IQ, test scores, SAT, etc).

I wanted to help other people feel the satisfaction that I felt when, after considerable thought and sweat, I finally "saw the light". I can see some "lights" in the pupils but time is very limited.

Teaching for me was selected because I personally am interested in improving myself and mankind. I'm in search of the why and how of man and mankind. The Mastery Learning Project is simply an area in which I can develop and learn about myself and maybe gain some insight into human nature and gain some knowledge about our purpose for being here (Earth).

The Mastery Learning Project has been the first opportunity for me to give individual pupil instruction since I entered teaching to a set number of pupils on a regular basis. It is the closest I have been to what I perceive to be an ideal teaching situation.

The MLTA Project has helped me to aid students who are having difficulty with certain areas in mathematics. I can deal more effectively (1-on-1) with individual problems of students.

When I began teaching, my prime goal was to make every student an "A" pupil. Needless to say, I was unsuccessful and frustrated. However, this project has aided me in realizing that, with some individual attention, most pupils are able to improve their basic math skills. All pupils will not be "A" pupils, but improvement can be made.

My goal was, and is, to have fewer adults and students say, "I can't do math". Students of all ages and adults seem to think by saying this they can become excused from doing any math or serious thinking. I know mastery learning has helped some MLTA Project students so they won't have to use this excuse.

English

The problem with this project, as with my teaching experience in general, is that I have become extremely frustrated and exasperated because the scope/funding of the project is too little/narrow to accomplish enough of my goals. There is too little time and too little money to affect enough pupils.

This job has helped to accomplish my goals because I wished to teach the basics of language structure and I wished to deal with the average child. I have often felt that the average, hard working child has been forgotten in this day of special programs for high and low achievers.

Participating in the MLTA Project has helped me reach a goal of close, personal contact with my students. To help them on a 1-to-1 basis was never possible before.

It has given me a better chance to show my deep concern for their learning and improved behavior. I have had the rare opportunity to catch problems at the exact moment they happen and work to correct them on such a delightful personal level that I am tempted to resign as a teacher (with my feelings of being flooded with students) and become a tutor! Not seriously, of course, but it has given me a glimpse of teaching/learning as it should be. I have had a glimpse of paradise.

MASTERY LEARNING: TEAM APPROACH

NON-PROJECT INSERVICE WORKSHOP
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